



# Guest & IoT Manager REST APIs

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# Contents

<b>Chapter 1: About this Document</b> .....	5
Purpose.....	5
Conventions.....	5
Documentation and Training.....	6
Getting Help.....	7
Providing Feedback to Us.....	8
<b>Chapter 2: New in this Document</b> .....	9
<b>Chapter 3: Guest and IoT Manager RESTful Web Services Introduction</b> .....	10
<b>Chapter 4: Guest and IoT Manager REST API Initial Setup</b> .....	11
Setting up Guest and IoT Manager REST API.....	11
Creating Onboarding Templates in Guest and IoT Manager.....	11
Creating a Provisioner and Associating it with Onboarding Templates.....	12
Downloading and Installing Firefox RESTClient Plugin.....	12
Adding Guest and IoT Manager REST API Version.....	14
Authenticating a Provisioner.....	16
Guest and IoT Manager API Info.....	18
Common Error Cases.....	19
<b>Chapter 5: Guest and IoT Manager REST APIs</b> .....	22
Fetching Onboarding Templates for a Provisioner.....	22
Fetching Details of a Specific Onboarding Template.....	23
Device Operations.....	33
Device Registration.....	33
Update a Device.....	36
Delete a Device.....	38
Deleting Multiple Devices.....	39
Bulk Delete of Devices for a Provisioner.....	40
Fetching Device Details by MAC for a Provisioner.....	41
Fetching Devices Iteratively for a Provisioner.....	43
Fetching Devices Based on Filter Criteria.....	50
Fetching Devices Custom Labels.....	53
API to Query the Status of Single Device.....	54
API to Query the Status of Multiple Devices.....	55
Guest User Operations.....	56
Guest User Registration .....	56
Re-send Credentials Through EMAIL/SMS to Guest User by Username.....	61
Update a Guest User.....	62
Delete a Guest User.....	65
Deleting Multiple Guest Users.....	66
Bulk Delete of Guest Users for a Provisioner.....	67

## Contents

Fetching Guest User Details by Username for a Provisioner.....	68
Fetching Guest Users Iteratively for a Provisioner.....	71
Fetching Guest Users Based on Filter Criteria.....	77
Fetching Guest User Custom Labels.....	80
API to Query the Status of Single User.....	81
API to Query the Status of Multiple Users.....	82

# Chapter 1: About this Document

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## Purpose

Use this document to integrate the Guest and IoT Manager with other standalone or web applications, to create Guest Users and Devices for a Provisioner. You can also obtain information about the Guest Users and Devices of the Provisioner from the Guest and IoT Manager.

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## Conventions






This section discusses the conventions used in this guide.

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## Text Conventions

The following tables list text conventions that can be used throughout this document.

**Table 1: Notice Icons**

Icon	Alerts you to...
 <b>Important:</b>	Key information that does not carry with it the risk of personal injury, death, system failure, service interruption, loss of data, damage to equipment, or electrostatic discharge.
 <b>Note:</b>	Important features or instructions.
 <b>Tip:</b>	Helpful tips and notices for using the product.
 <b>Warning:</b>	A potential hazard exists that, if not avoided, can result in harm to hardware or equipment.
 <b>Caution:</b>	Practices that are not safe or are potential hazards not covered by danger or warning messages.

**Table 2: Text Conventions**

Convention	Description
Angle brackets ( < > )	<p>Angle brackets ( &lt; &gt; ) indicate that you choose the text to enter based on the description inside the brackets. Do not type the brackets when you enter the command.</p> <p>If the command syntax is <code>cfm maintenance-domain maintenance-level &lt;0-7&gt;</code> , you can enter <code>cfm maintenance-domain maintenance-level 4</code>.</p>
<b>Bold text</b>	<p>Bold text indicates the GUI object name you must act upon.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Click <b>OK</b>.</li> <li>• On the <b>Tools</b> menu, choose <b>Options</b>.</li> </ul>
<i>Italic Text</i>	<p>Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles that are not active links.</p>
Plain Courier Text	<p>Plain Courier text indicates command names, options, and text that you must enter. Plain Courier text also indicates command syntax and system output, for example, prompts and system messages.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• <code>show ip route</code></li> <li>• <code>Error: Invalid command syntax [Failed] [2018-09-12 13:37:03.303 -04:00]</code></li> </ul>
Separator ( > )	<p>A greater than sign ( &gt; ) shows separation in menu paths.</p> <p>For example, in the Navigation tree, expand the <b>Configuration &gt; Edit</b> folders.</p>

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## Documentation and Training

To find Extreme Networks product guides, visit our documentation pages at:

Current Product Documentation	<a href="http://www.extremenetworks.com/documentation/">www.extremenetworks.com/documentation/</a>
Archived Documentation (for earlier versions and legacy products)	<a href="http://www.extremenetworks.com/support/documentation-archives/">www.extremenetworks.com/support/documentation-archives/</a>
Release Notes	<a href="http://www.extremenetworks.com/support/release-notes">www.extremenetworks.com/support/release-notes</a>
Hardware/Software Compatibility Matrices	<a href="https://www.extremenetworks.com/support/compatibility-matrices/">https://www.extremenetworks.com/support/compatibility-matrices/</a>
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A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

### [Call GTAC](#)

For immediate support: 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact)

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

## Subscribing to Service Notifications

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1. Go to [www.extremenetworks.com/support/service-notification-form](http://www.extremenetworks.com/support/service-notification-form).
2. Complete the form with your information (all fields are required).
3. Select the products for which you would like to receive notifications.

 **Note:**

You can modify your product selections or unsubscribe at any time.

4. Click **Submit**.

---

## Providing Feedback to Us

Quality is our first concern at Extreme Networks, and we have made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

- Content errors or confusing or conflicting information.
- Ideas for improvements to our documentation so you can find the information you need faster.
- Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team, you can do so in two ways:

- Use our short online feedback form at <https://www.extremenetworks.com/documentation-feedback/>.
- Email us at [documentation@extremenetworks.com](mailto:documentation@extremenetworks.com).

Please provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.



# Chapter 2: New in this Document

The following sections detail what is new in this document.

## **URI update**

The URI for the following Rest APIs are updated:

- [Fetching Devices Based on Filter Criteria](#) on page 50
- [Fetching Guest Users Based on Filter Criteria](#) on page 77

# Chapter 3: Guest and IoT Manager RESTful Web Services Introduction

REpresentational State Transfer, or REST, is an architectural style for providing standards between computer systems on the web and making it easier for systems to communicate with each other. When applied to a web service, REST greatly improves its performance, scalability, and modifiability.

REST APIs are application program interfaces that are based on open standards and can be accessed using any web development language.

In the RESTful architectural style, data and functionality are considered as resources. The Guest and IoT Manager REST APIs provides access to resources using URI paths. To use a REST API, your application makes an HTTPS request and parses the response. The Guest and IoT Manager REST API uses JSON as its communication format, and standard HTTP methods like GET, PUT, POST and DELETE.

# Chapter 4: Guest and IoT Manager REST API Initial Setup

This chapter describes how to create Provisioners and Onboarding Templates. It also describes how to download and install the Firefox RESTClient plugin.

---

## Setting up Guest and IoT Manager REST API

Use these procedures in sequence to enable the Guest and IoT Manager REST APIs.

1. Create an Onboarding Template in the Guest and IoT Manager (GIM). For more information, see [Creating Onboarding Templates in Guest and IoT Manager](#) on page 11.
2. Create a Provisioner in GIM. For more information, see [Creating a Provisioner and Associating it with Onboarding Templates](#) on page 12.
3. Download and install the RESTClient plugin for Firefox. For more information, see [Downloading and Installing Firefox RESTClient Plugin](#) on page 12.

---

## Creating Onboarding Templates in Guest and IoT Manager

Use this procedure to create Onboarding Templates in Guest and IoT Manager.

### Procedure

1. In a browser instance, enter the Guest and IoT Manager IP address: `https://<Guest and IoT Manager IP address>/GIM/admin`.
2. Enter the username and password when prompted. The default username and password are `admin` and `admin` respectively.
3. Click **Onboarding Templates**.

For more information on how to create Onboarding Templates, see the document: *Guest and IoT Manager Configuration*.

---

## Creating a Provisioner and Associating it with Onboarding Templates

Use this procedure to create a Provisioner and associate it with existing Onboarding Templates in the Guest and IoT Manager.

### Procedure

1. Log on to Guest and IoT Manager using your default credentials.
2. Click **Provisioners** to create a Provisioner and associate it with an Onboarding Template.

For more information, see the document: *Guest and IoT Manager Configuration*.

---

## Downloading and Installing Firefox RESTClient Plugin

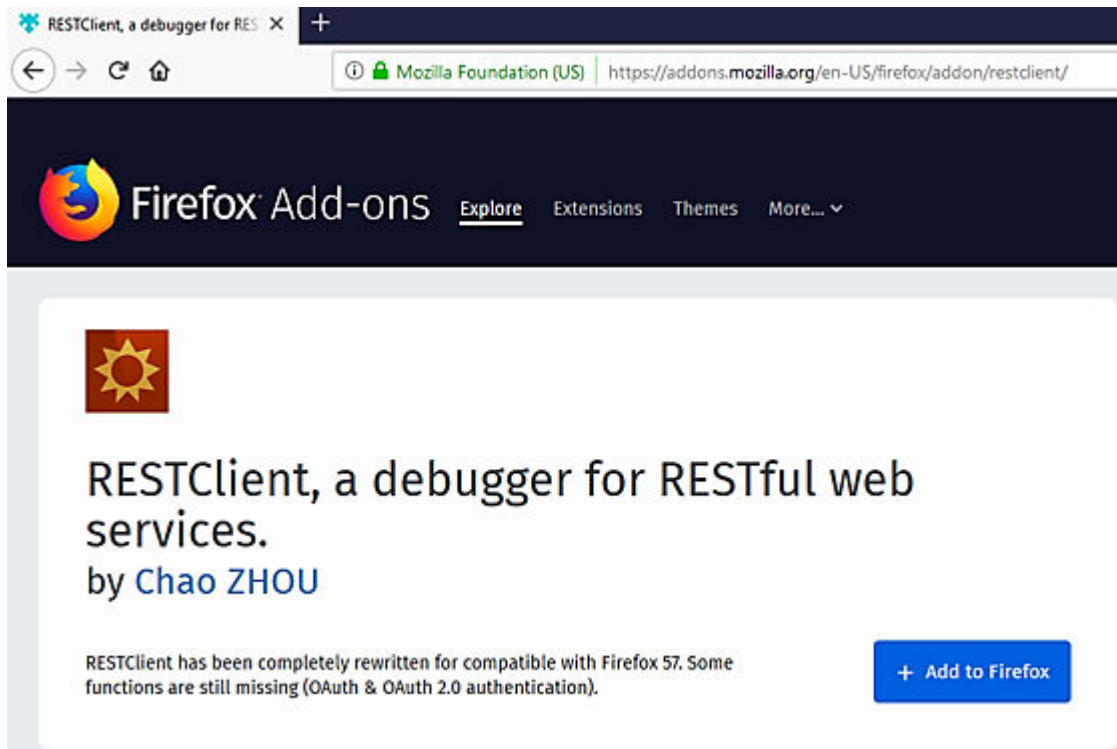
Use this procedure to download and install the Firefox RESTClient plugin.

### Procedure

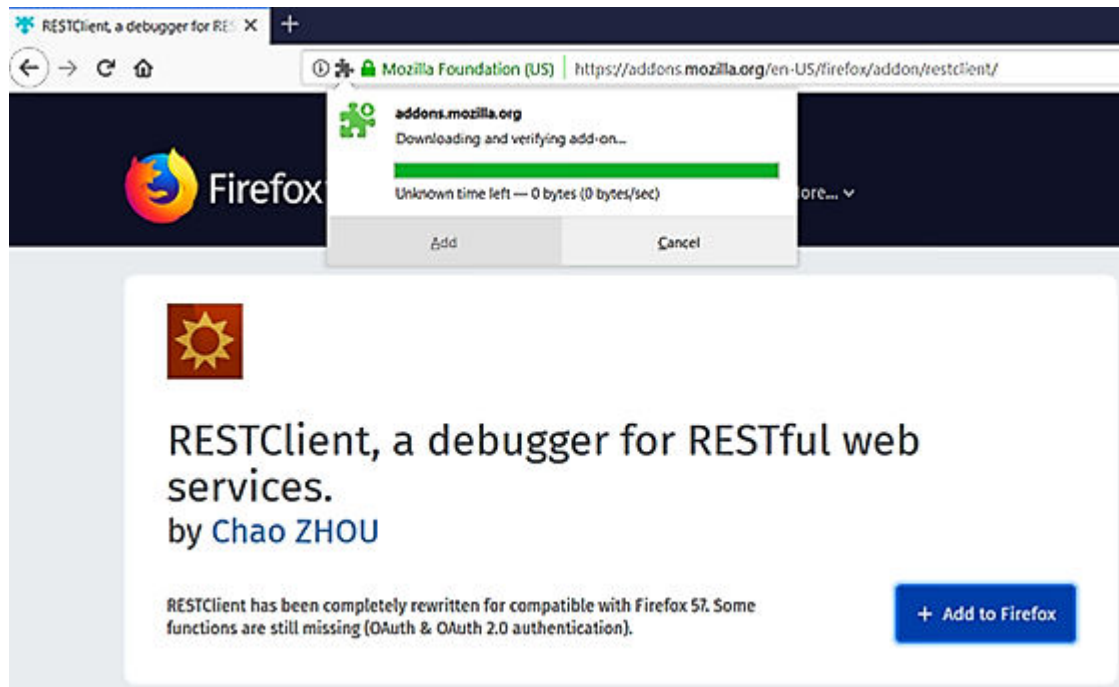
1. On a Mozilla Firefox browser instance, enter the following URL:

<https://addons.mozilla.org/en-us/firefox/addon/restclient/>

2. Click **+ Add to Firefox**.

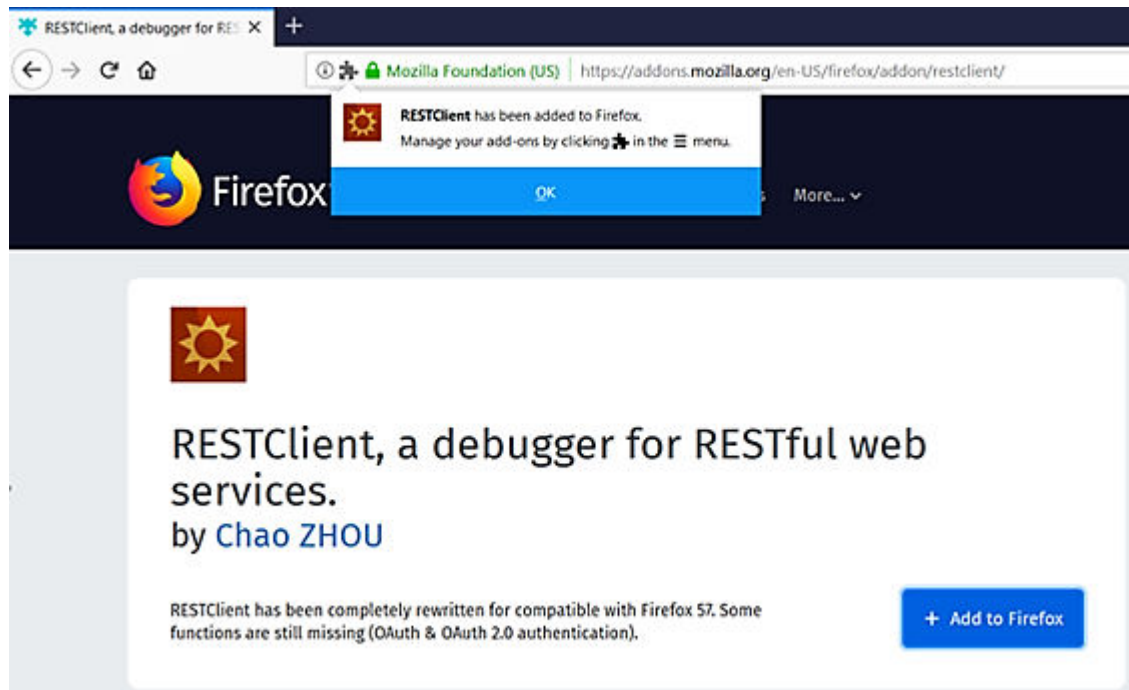


The plugin begins to download and is automatically verified, as shown in the figure below:



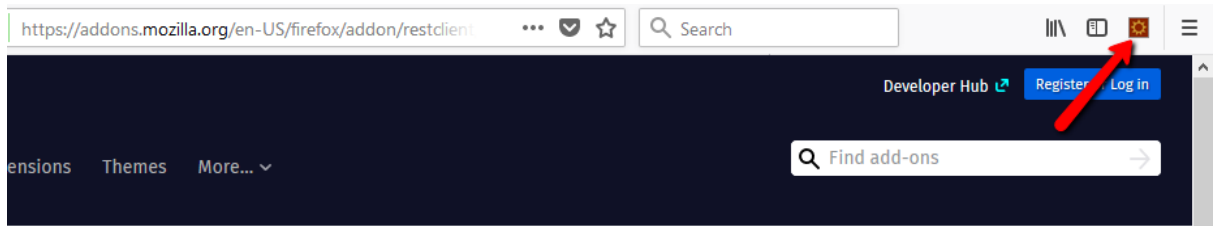
3. When prompted to add the RESTClient plugin, click **Add**.

On successful install, the system displays the following message:



4. Click **OK**.

The system displays the RESTClient plugin icon on the top-right-hand corner of your browser:



5. Click the icon to launch the RESTClient plugin.



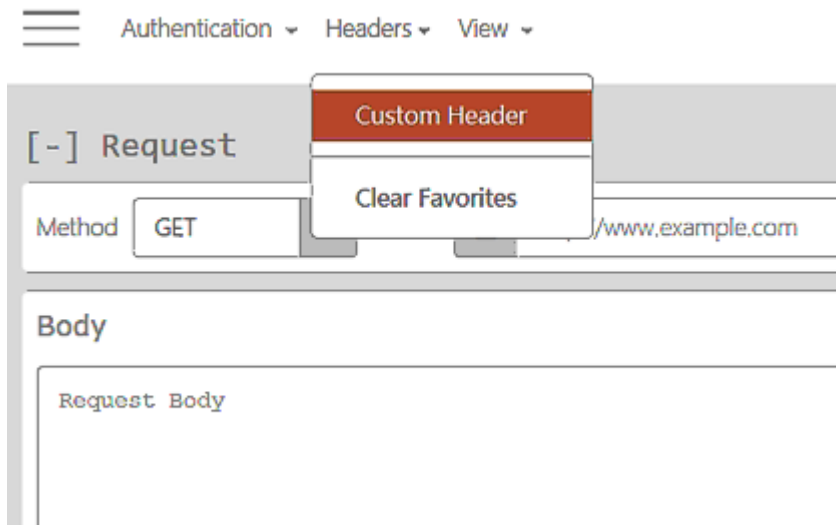
---

## Adding Guest and IoT Manager REST API Version

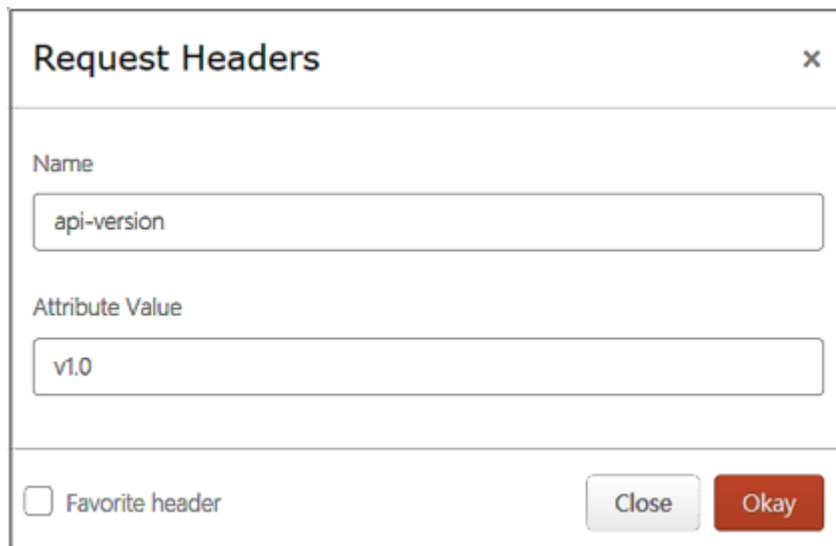
Maintaining API versions enables a client to identify and use the latest REST Web Services. Use this procedure to add an API version in the REST API HTTP header.

## Procedure

1. In the RESTClient interface, click **Headers > Custom Header**.

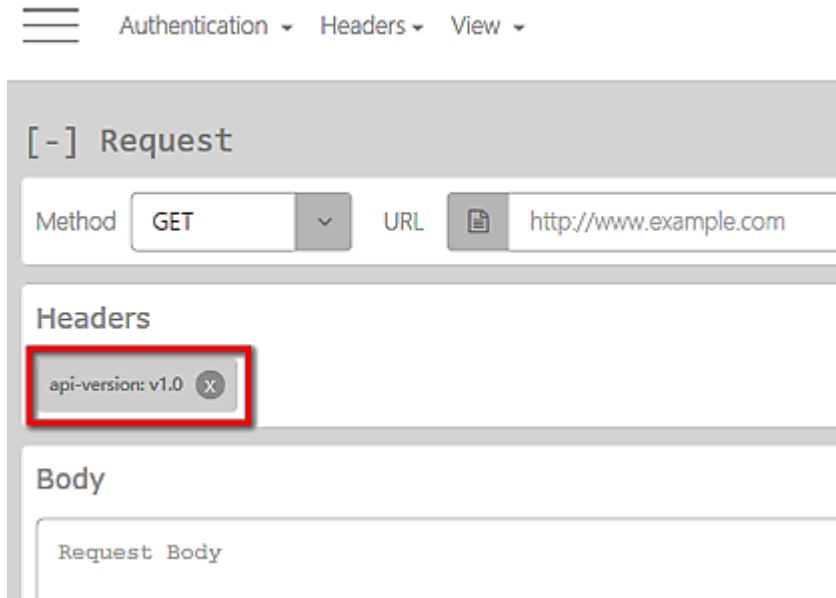


2. In the Request Headers dialog box, enter a version name and value for the API in the **Name** and **Attribute Value** fields.

A screenshot of the 'Request Headers' dialog box. The dialog has a title bar with 'Request Headers' and a close button. It contains two input fields: 'Name' with the value 'api-version' and 'Attribute Value' with the value 'v1.0'. At the bottom, there is a checkbox labeled 'Favorite header' which is unchecked, and two buttons: 'Close' and 'Okay'.

3. Click **Okay**.

The version information is added to the **Headers** section.



---

## Authenticating a Provisioner

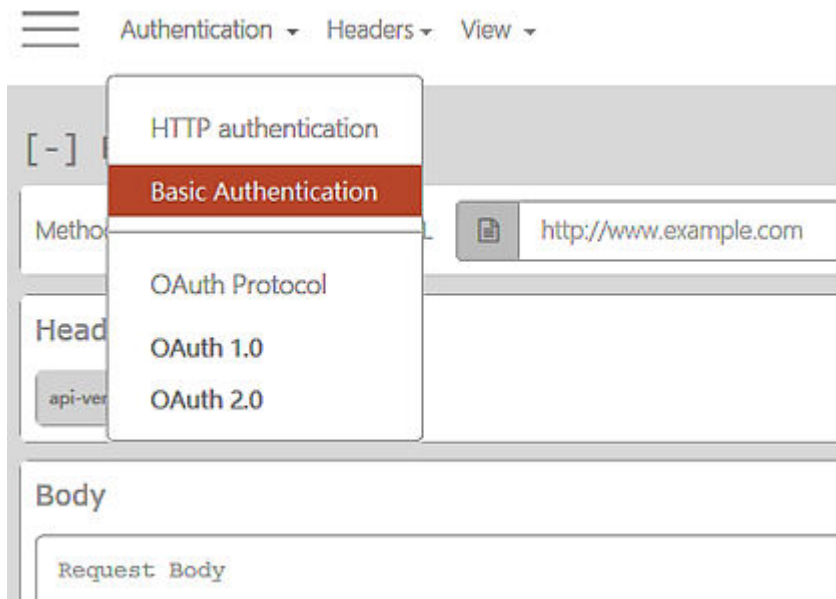
An API requires an Authentication header to authenticate a Provisioner. The Provisioner login credentials must be Base64 encrypted with the Basic Authorization Scheme.

- **Authorization Scheme:** Basic (Base64 encryption)
- **Authorization:** username:password

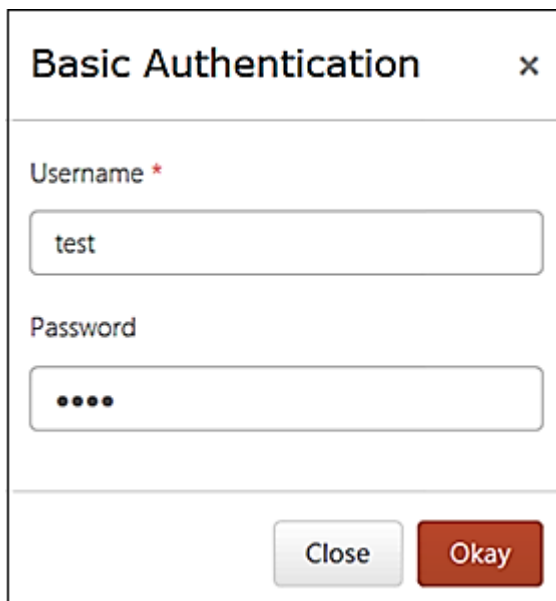


## Procedure

1. In the RESTClient interface, click **Authentication > Basic Authentication**.

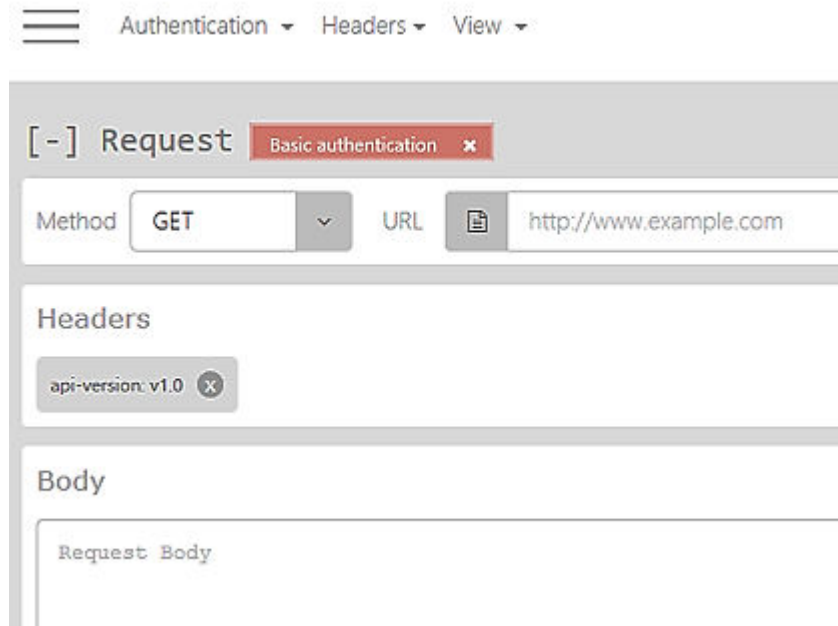


2. In the Basic Authentication dialog box, enter a username and password for the API in the **Username** and **Password** fields.

A screenshot of the 'Basic Authentication' dialog box. The dialog has a title bar with 'Basic Authentication' and a close button (X). Below the title bar, there are two input fields. The first is labeled 'Username \*' and contains the text 'test'. The second is labeled 'Password' and contains five dots. At the bottom of the dialog, there are two buttons: 'Close' and 'Okay'.

3. Click **Okay**.

The authentication information is added to the API, as shown in the figure below:



**! Important:**

It is important that all APIs set "Content-Type" header as "application/json".

## Guest and IoT Manager API Info

Use this API to get basic information about the Guest and IoT Manager REST APIs.

**\* Note:**

The authorization and api-version HTTP header is not required for API Info.

Guest and IoT Manager API info	
<b>URI</b>	/rest/apiInfo
<b>HTTP Header</b>	Accept: application/json
<b>Response</b>	<p>The Format of response preview is JSON.</p> <p>The Response preview contains the following information.</p> <ul style="list-style-type: none"> <li>• apiPath: The base path used to fetch the API info.</li> <li>• name: Service Name.</li> <li>• vendor: Name of the Vendor.</li> <li>• product Name: Name of the product.</li> <li>• version: API version.</li> </ul>

*Table continues...*

Guest and IoT Manager API info	
	<ul style="list-style-type: none"> <li>• gim Version: Version of Guest &amp; IoT Manager</li> </ul>
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/apiInfo HTTP/1.1 Host: 192.0.2.1 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response (JSON Format)</b></p> <pre>{   "apiPath": "/rest",   "name": "ExtremeControl Guest &amp; IoT Manager REST API",   "productName": "ExtremeControl Guest &amp; IoT Manager",   "gimVersion": "8.2.3.1231",   "vendor": "Extreme Networks.",   "version": "v1.0" }</pre>

**\* Note:**

The Guest and IoT Manager base URL must be prefixed with all Guest and IoT Manager API URIs.

For example, if the Guest and IoT Manager base URL is `https://192.0.2.1/GIM` then the API info URI will be `https://192.0.2.1/GIM/rest/apiInfo`.

## Common Error Cases

The following table describes Common Error Cases:

Error Case	Response Code	Error Response
Authorization Header missing	401 Unauthorized	errorCode: AUTHORIZATION_REQUIRED msg: Authorization required.
Missing version	406 Not Acceptable	errorCode: VERSION_REQUIRED msg: API Version required, refer API doc for details.
Invalid version format	406 Not Acceptable	errorCode: INVALID_VERSION_FORMAT msg: API version is not a valid format, refer API doc for details.
Version not supported	406 Not Acceptable	errorCode: INVALID_VERSION_FORMAT msg: API version is not supported.

*Table continues...*

Error Case	Response Code	Error Response
Internal Server Error	500 Internal Server Error	errorCode: INTERNAL_ERROR msg: Internal Server Error. Please contact Administrator.
Provisioner is not associated with any REST API Onboarding Template	401 Unauthorized	errorCode: PROVISIONING_ACCESS_DENIED msg: Your account does not have permission to provision the Guest User or Device.
Invalid Credentials	401 Unauthorized	errorCode: INVALID_CREDENTIALS msg: Invalid Username and/or Password.
Radius Error	503 Service Unavailable	errorCode: RADIUS_ERROR msg: Radius server error <error msg>
Onboarding Template is not accessible/invalid	400 Bad Request	errorCode: ONBOARDING_TEMPLATE_ACCESS_DENIED msg: Your account does not have permission to access the Onboarding Template: {template name}
Does not have permission to provision the Device	400 Bad Request	errorCode: DEVICE_PROVISIONING_ACCESS_DENIED msg: You do not have the permission to create the Device, Please contact Administrator.
Does not have permission to provision the Guest User	400 Bad Request	errorCode: GUEST_USER_PROVISIONING_ACCESS_DENIED msg: You do not have the permission to create the Guest User accounts, Please contact Administrator.
Invalid input data	400 Bad Request	errorCode: INVALID_RECORD msg: JSON of the format <Error_Field_Name>:<Reason_For_Failure>.

*Table continues...*

Error Case	Response Code	Error Response
		For example: "endDate": "End date is less than start date"
Record already exists with the same macAddress	400 Bad Request	errorCode: DUPLICATE_DEVICE_RECORD  msg: The Device you provided already exists. Please provide a different MAC address.
Record already exists with the same userName	400 Bad Request	errorCode: DUPLICATE_GUEST_USER_RECORD  msg: The username you provided already exists. Please provide a different username.
Limit of enabled devices reached for the Provisioner	403 Forbidden	errorCode: PROVISIONING_DEVICE_LIMIT_EXCEED  msg: Limit on Number of enabled devices has been reached. Delete/ Disable Devices to reach level below limit: {limit}
Access Control Engine Not Reachable / Request Timeout	503 Service Unavailable	errorCode: SERVER_UNAVAILABLE  msg: Access Control Engine not reachable. Please try again.

# Chapter 5: Guest and IoT Manager REST APIs

This chapter describes the Guest and IoT Manager REST APIs to fetch the list and details of Onboarding Templates, Devices and Guest Users for a Provisioner.

**\* Note:**

Only HTTPS mode of access is supported for Guest and IoT Manager REST APIs.

---

## Fetching Onboarding Templates for a Provisioner

Use this API to fetch the list of REST API Onboarding Templates that are associated with a Provisioner.

Fetching Onboarding Templates for a Provisioner	
<b>URI</b>	/rest/onboardingTemplates
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version: {VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	List of Onboarding Template names
<b>Example</b>	<b>Request</b> <pre>GET /GIM/rest/onboardingTemplates HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <b>Response Payload</b>

*Table continues...*

Fetching Onboarding Templates for a Provisioner
<p><b>JSON Format</b></p> <pre> {   "OnboardingTemplates": {     "OnboardingTemplateName": [       "api-device-OT",       "api-device-OT2",     ]   } } </pre> <p><b>Sample Error Response</b></p> <pre> {   "error": {     "errorCode": "AUTHORIZATION_REQUIRED",     "msg": "Authorization required."   } } </pre>

## Fetching Details of a Specific Onboarding Template

Use this API to query the details of a specific Onboarding Template from the set of REST API Onboarding Templates that are associated with the Provisioner.

**\* Note:**

The Onboarding Template name can contain alphanumeric / special characters and spaces between words. The supported special characters are: # =() \_- .! []. All special characters must be encoded.

Fetching the Details of a specific Onboarding Template	
<b>URI</b>	/rest/onboardingTemplateDetails/{onboardingTemplateName}
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Onboarding Template details
<b>Example</b>	<p><b>Request</b></p> <pre> GET /GIM/rest/onboardingTemplateDetails/api-device!-OnboardTemplate# HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 </pre>

*Table continues...*

**Fetching the Details of a specific Onboarding Template**

Authorization: Basic dGVzdDp0ZXN0  
 Accept:application/json

The following example displays the details of the Onboarding Template `api-device!-OnboardTemplate#` with Guest User and Device rights associated with it.

**JSON Format**

```
{
  "OnboardingTemplate": {
    "OTName": "api-device!-OnboardTemplate#",
    "maxDuration": 8,
    "durationUnit": "HOURS",
    "timezone": "(GMT-12:00) Etc/GMT+12 [-12]",
    "guestUsersAllowed": true,
    "devicesAllowed": true,
    "guestUserDetails": {
      "userNameAccessible": false,
      "passwordAccessible": false,
      "firstAndLastNameAccessible": true,
      "firstAndLastNameRequired": true,
      "emailRequired": true,
      "mobilePhoneRequired": true,
      "accountExpirationAccessible": true,
      "accountActivationAtFirstLogin": false,
      "guestEmailNotification": true,
      "guestSMSNotification": true,
      "displayUserName": false,
      "displayPassword": false,
      "deleteOnExpire": true,
      "accessGroups": true,
      "singleMembershipUserGroups": ["IT","sales"],
      "multipleMembershipsUserGroups": ["wired", "wireless"],
      "custom1Accessible": false,
      "custom1Required": false,
      "custom2Accessible": false,
      "custom2Required": false,
      "custom3Accessible": false,
      "custom3Required": false,
      "custom4Accessible": false,
      "custom4Required": false,
      "custom5Accessible": false,
      "custom5Required": false,
      "custom6Accessible": false,
      "custom6Required": false
    },
    "deviceDetails": {
      "deviceNameAccessible": true,
      "deviceNameRequired": false,
      "deviceTypeGroupAccessible": true,
      "deviceTypeGroupRequired": false,
      "deviceTypeAccessible": true,
      "deviceTypeRequired": false,
      "accessibleDeviceTypeGroups": {
        "BlackBerry": [
          "BB10",
          "BlackBerry",
          "BlackBerry Playbook"
        ],
        "Chrome OS": [
          "Chrome OS",

```

*Table continues...*



**Fetching the Details of a specific Onboarding Template**

```

        "Chromium OS",
        "CrOS"
    ]
},
    "assetType" : true,
    "assetTypeDefault" : "TEMPORARY",
    "deleteOnExpire" : true,
    "accessGroups" : true,
    "singleMembershipEndSystemGroups": ["IT","sales"],
    "multipleMembershipsEndSystemGroups":
["wired","wireless"],
    "custom1Accessible": false,
    "custom1Required": false,
    "custom2Accessible": false,
    "custom2Required": false,
    "custom3Accessible": false,
    "custom3Required": false,
    "custom4Accessible": false,
    "custom4Required": false,
    "custom5Accessible": false,
    "custom5Required": false,
    "custom6Accessible": false,
    "custom6Required": false
}
}
}
}

```

**Guest User Rights Onboarding Template**

The following example displays the details of the Onboarding Template `api-device!-OnboardTemplate1#` with Guest User rights associated with it.

```

{
  "OnboardingTemplate": {
    "OTName": "api-device!-OnboardTemplate1#",
    "maxDuration": 8,
    "durationUnit": "HOURS",
    "timezone": "(GMT-12:00) Etc/GMT+12 [-12]",
    "guestUsersAllowed": true,
    "devicesAllowed": false,
    "guestUserDetails": {
      "userNameAccessible": false,
      "passwordAccessible": false,
      "firstAndLastNameAccessible": true,
      "firstAndLastNameRequired": true,
      "emailRequired": true,
      "mobilePhoneRequired": true,
      "accountExpirationAccessible": true,
      "accountActivationAtFirstLogin": false,
      "guestEmailNotification": true,
      "guestSMSNotification": true,
      "displayUserName": false,
      "displayPassword": false,
      "deleteOnExpire" : true,
      "accessGroups" : true,
      "singleMembershipUserGroups" : ["IT","sales"],
      "multipleMembershipsUserGroups" : ["wired", "wireless"],
      "custom1Accessible": false,
      "custom1Required": false,
      "custom2Accessible": false,

```

*Table continues...*

**Fetching the Details of a specific Onboarding Template**

```

        "custom2Required": false,
        "custom3Accessible": false,
        "custom3Required": false,
        "custom4Accessible": false,
        "custom4Required": false,
        "custom5Accessible": false,
        "custom5Required": false,
        "custom6Accessible": false,
        "custom6Required": false
    }
}
}

```

**Device Rights Onboarding Template**

The following example displays the details of the Onboarding Template `api-device!-OnboardTemplate2#` with Device rights associated with it.

```

{
  "OnboardingTemplate": {
    "OTName": "api-device!-OnboardTemplate2#",
    "maxDuration": 8,
    "durationUnit": "HOURS",
    "timezone": "(GMT-12:00) Etc/GMT+12 [-12]",
    "guestUsersAllowed": false,
    "devicesAllowed": true,
    "deviceDetails": {
      "deviceNameAccessible": true,
      "deviceNameRequired": false,
      "deviceTypeGroupAccessible": true,
      "deviceTypeGroupRequired": false,
      "deviceTypeAccessible": true,
      "deviceTypeRequired": false,
      "accessibleDeviceTypeGroups": {
        "BlackBerry": [
          "BB10",
          "BlackBerry",
          "BlackBerry Playbook"
        ],
        "Chrome OS": [
          "Chrome OS",
          "Chromium OS",
          "CrOS"
        ]
      }
    },
    "assetType": true,
    "assetTypeDefault": "TEMPORARY",
    "deleteOnExpire": true,
    "accessGroups": true,
    "singleMembershipEndSystemGroups": ["IT","sales"],
    "multipleMembershipsEndSystemGroups": ["wired","wireless"],
    "custom1Accessible": false,
    "custom1Required": false,
    "custom2Accessible": false,
    "custom2Required": false,
    "custom3Accessible": false,
    "custom3Required": false,
    "custom4Accessible": false,
    "custom4Required": false,
    "custom5Accessible": false,
    "custom5Required": false,

```

*Table continues...*

Fetching the Details of a specific Onboarding Template	
	<pre>                 "custom6Accessible": false,                 "custom6Required": false             }         }     }         </pre>

## Variable Definition

The following table describes the parameters for the Onboarding Template, Guest User, and Device details.

### Onboarding Template

Attribute	Type/Value	Description
OTName	String	Specifies the Onboarding Template name. The maximum length of the name must be 30 characters and the allowed characters are alphabets (upper and lower case), numbers (0 to 9) and special characters (# = () _ - . ! []).
maxDuration	Long	Specifies the maximum duration for which the guest user or device account is valid.
durationUnit	String	Specifies the duration in minutes, hours or days.
timezone	String	Specifies the time zone. For example, Indian Standard Time is displayed as (GMT+05:30) Asia / Kolkata [IST].
guestUsersAllowed	Boolean	Specifies whether the Provisioner can create Guest User accounts. Parameters and values are: <ul style="list-style-type: none"> <li>• If guestUsersAllowed is true, then allow the Provisioner to create Guest User accounts.</li> <li>• If guestUsersAllowed is false, then do not allow the Provisioner to create Guest User accounts.</li> </ul>
devicesAllowed	Boolean	Specifies whether the Provisioner can create device records. Parameters and values are: <ul style="list-style-type: none"> <li>• If devicesAllowed is true, then allow the Provisioner to create Device records.</li> <li>• If devicesAllowed is false, then do not allow the Provisioner to create Device records.</li> </ul>
guestUserDetails	Object	For more information, see Guest User details table below.
deviceDetails	Object	For more information, see Device details table below.

### Guest User Details

Attribute	Type/Value	Description
userNameAccessible	Boolean	Specifies if the username is required. Parameters and values are: <ul style="list-style-type: none"> <li>• If userNameAccessible is true, then username value is used.</li> <li>• If userNameAccessible is false, then username is optional and value is ignored.</li> </ul>
passwordAccessible	Boolean	Specifies if password is required. Parameters and values are: <ul style="list-style-type: none"> <li>• If passwordAccessible is true, then password value is used.</li> <li>• If passwordAccessible is false, then password value is optional and value is ignored.</li> </ul>
firstAndLastNameAccessible	Boolean	Specifies whether the Provisioner can set the first and last name. Parameters and values are: <ul style="list-style-type: none"> <li>• If firstAndLastNameAccessible is true, then the Provisioner can set the first and last name.</li> <li>• If firstAndLastNameAccessible is false, then the Provisioner cannot set the first and last name.</li> </ul>
firstAndLastNameRequired	Boolean	Specifies whether the first and last name is required. Parameters and values are: <ul style="list-style-type: none"> <li>• If firstAndLastNameRequired is true, then first and last name are required.</li> <li>• If firstAndLastNameRequired is false, then first and last name are optional.</li> </ul>
emailRequired	Boolean	Specifies whether the email address is mandatory. Parameters and values are: <ul style="list-style-type: none"> <li>• If emailRequired is true, then email is mandatory.</li> <li>• If emailRequired is false, then email is optional.</li> </ul>
mobilePhoneRequired	Boolean	Specifies whether mobile phone number is mandatory. Parameters and values are: <ul style="list-style-type: none"> <li>• If mobilePhoneRequired is true, then mobile phone number is mandatory.</li> <li>• If mobilePhoneRequired is false, then mobile phone number is optional.</li> </ul>
accountExpirationAccessible	Boolean	Specifies whether the Provisioner can change the account validity duration of the Guest User account. The duration

*Table continues...*

Attribute	Type/Value	Description
		cannot be more than Maximum Validity Duration configured in the Onboarding Template. Parameters and values are: <ul style="list-style-type: none"> <li>• If accountExpirationAccessible is true, then the Provisioner can change the account validity duration by providing either an end Date or duration value.</li> <li>• If accountExpirationAccessible is false, then the Provisioner cannot change the account validity duration. The maximum duration configured in the Onboarding Template is used.</li> </ul>
accountActivationAtFirstLogin	Boolean	Specifies the type of account activation. Parameters and values are: <ul style="list-style-type: none"> <li>• If accountActivationAtFirstLogin is true, then the Guest User account gets activated on first login and start time is calculated from the first time login.</li> <li>• If accountActivationAtFirstLogin is false, then the Guest User account gets activated from the given start time.</li> </ul>
guestEmailNotification	Boolean	Specifies whether an email notification must be sent to the Guest. Parameters and values are: <ul style="list-style-type: none"> <li>• If guestEmailNotification is true, then guest receives an email notification.</li> <li>• If guestEmailNotification is false, then guest does not receive email notification.</li> </ul>
guestSMSNotification	Boolean	Specifies whether SMS notification must be sent to the Guest. Parameters and values are: <ul style="list-style-type: none"> <li>• If guestSMSNotification is true, then guest receives the notification through SMS.</li> <li>• If guestSMSNotification is false, then guest does not receive notification through SMS.</li> </ul>
displayUserName	Boolean	Specifies whether the username must be sent in the response. Parameters and values are: <ul style="list-style-type: none"> <li>• If displayUserName is true, then username is sent.</li> <li>• If displayUserName is false, then username is not sent.</li> </ul>
displayPassword	Boolean	Specifies whether the password must be sent in the response. Parameters and values are: <ul style="list-style-type: none"> <li>• If displayPassword is true, then password is sent.</li> <li>• If displayPassword is false, then password is not sent.</li> </ul>

*Table continues...*

Attribute	Type/Value	Description
deleteOnExpire	Boolean	Specifies whether deleteOnExpire must be sent in the request. Parameters and values are: <ul style="list-style-type: none"> <li>• If deleteOnExpire is true, then deleteOnExpire is sent. The value sent overrides the default value set by the Administrator in the Onboarding Template.</li> <li>• If deleteOnExpire is false, then deleteOnExpire is not sent. The value configured in the Onboarding Template is used.</li> </ul>
singleMembershipUserGroups	Array	Specifies the single membership user groups configured in the Onboarding Template by the Guest and IoT Manager Administrator.
multipleMembershipsUserGroups	Array	Specifies the multiple membership user groups configured in the Onboarding Template by the Guest and IoT Manager Administrator.
accessGroups	Boolean	Specifies whether the Provisioner can configure Single and Multiple Membership User Groups. Parameters and values are: <ul style="list-style-type: none"> <li>• If accessGroups is true, then singleMembershipUserGroups and multipleMembershipsUserGroups are sent.</li> <li>• If accessGroups is false, then singleMembershipUserGroups and multipleMembershipsUserGroups are not sent.</li> </ul>
custom1-6Accessible	Boolean	Specifies whether the Provisioner can configure values for custom attributes 1-6. Parameters and values are: <ul style="list-style-type: none"> <li>• If custom1-6Accessible is true, then the Provisioner can configure values for custom1-6 attributes.</li> <li>• If custom1-6Accessible is false, then the Provisioner can not configure values for custom1-6 attributes.</li> </ul>
custom1-6Required	Boolean	Specifies whether value for custom1-6 is mandatory. Parameters and values are: <ul style="list-style-type: none"> <li>• If custom1-6Required is true, then custom 1-6 is mandatory.</li> <li>• If custom1-6Required is false, then custom 1-6 is optional.</li> </ul>

### Device Details

Attributes	Type/Value	Description
deviceNameAccessible	Boolean	Specifies whether the Provisioner can configure the Device name. Parameters and values are: <ul style="list-style-type: none"> <li>• If deviceNameAccessible is true, then the Provisioner can configure device name.</li> </ul>

*Table continues...*

Attributes	Type/Value	Description
		<ul style="list-style-type: none"> <li>If deviceNameAccessible is false, then the Provisioner cannot configure device name.</li> </ul>
deviceNameRequired	Boolean	<p>Specifies whether the device name is mandatory. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If deviceNameRequired is true, then Device name is mandatory.</li> <li>If deviceNameRequired is false, then Device name is optional.</li> </ul>
deviceTypeGroupAccessible	Boolean	<p>Specifies whether the Provisioner can configure the device type group. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If deviceTypeGroupAccessible is true, then the Provisioner can configure device type group.</li> <li>If deviceTypeGroupAccessible is false, then the Provisioner cannot configure device type group.</li> </ul>
deviceTypeGroupRequired	Boolean	<p>Specifies whether the device type group is required. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If deviceTypeGroupRequired is true, then device type group is mandatory.</li> <li>If deviceTypeGroupRequired is false, then device type group is optional.</li> </ul>
deviceTypeAccessible	Boolean	<p>Specifies whether the Provisioner can configure the device type. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If deviceTypeAccessible is true, then the Provisioner can configure the device type.</li> <li>If deviceTypeAccessible is false, then the Provisioner cannot configure the device type.</li> </ul>
deviceTypeRequired	Boolean	<p>Specifies whether the device type is mandatory. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If deviceTypeRequired is true, then device type is mandatory.</li> <li>If deviceTypeRequired is false, then device type is optional.</li> </ul>
accessibleDeviceTypeGroups	Object	Specifies the array of Device Type Groups and Device Types.
assetType	Boolean	<p>Specifies whether the assetType must be sent in the request. Parameters and values are:</p> <ul style="list-style-type: none"> <li>If assetType is true, then assetType is sent.</li> <li>If assetType is false, then assetType is not sent.</li> </ul>

*Table continues...*

Attributes	Type/Value	Description
assetTypeDefault	String	Specifies the value set in the Onboarding Template by the Administrator. The default value is TEMPORARY.
deleteOnExpire	Boolean	Specifies whether deleteOnExpire must be sent in the request. Parameters and values are: <ul style="list-style-type: none"> <li>• If deleteOnExpire is true, then deleteOnExpire is sent. The value sent overrides the default value set by the Administrator in the Onboarding Template.</li> <li>• If deleteOnExpire is false, then deleteOnExpire is not sent. The value configured in the Onboarding Template is used.</li> </ul>
singleMembershipEndSystemGroups	Array	Specifies the single membership End System Groups configured in the Onboarding Template by the Guest and IoT Manager Administrator.
multipleMembershipsEndSystemGroups	Array	Specifies the multiple membership End System Groups configured in the Onboarding Template by the Guest and IoT Manager Administrator.
accessGroups	Boolean	Specifies whether the Provisioner can configure Single and Multiple Membership End Systems Groups. Parameters and values are: <ul style="list-style-type: none"> <li>• If accessGroups is true, then singleMembershipEndSystemGroups and multipleMembershipsEndSystemGroups are sent.</li> <li>• If accessGroups is false, singleMembershipEndSystemGroups and multipleMembershipsEndSystemGroups are not sent.</li> </ul>
custom1-6Accessible	Boolean	Specifies whether the Provisioner can configure values for custom attributes 1-6. Parameters and values are: <ul style="list-style-type: none"> <li>• If custom1-6Accessible is true, then the Provisioner can configure values for custom1-6 attributes.</li> <li>• If custom1-6Accessible is false, then the Provisioner can not configure values for custom1-6 attributes.</li> </ul>
custom1-6Required	String	Specifies whether value for custom1-6 is mandatory. Parameters and values are: <ul style="list-style-type: none"> <li>• If custom1-6Required is true, then custom 1-6 is mandatory.</li> <li>• If custom1-6Required is false, then custom 1-6 is optional.</li> </ul>



## Device Operations

The following sections describe the create, read, update, and delete (CRUD) API operations with respect to Devices.

### Device Registration

This API allows the Provisioner to add a Device to the Guest and IoT Manager.

Register a device	
<b>URI</b>	/rest/devices
<b>Method</b>	POST
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	201 (created)
<b>Response Payload</b>	N/A
<b>Example</b>	<p><b>Request</b></p> <pre>POST /GIM/rest/devices HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-Type: application/json Cache-Control: no-cache</pre> <p><b>Request Payload</b></p> <p><b>JSON Format</b></p> <pre>{   "Device":{     "onboardingTemplateName": "api-OT_1",     "macAddress": "AA-00-00-00-07-01",     "deviceName": "devices",     "deviceTypeGroup": "Android",     "deviceType": "Nook",     "enabled": true,     "assetType": "TEMPORARY",     "startDate" : "2019/01/10 10:30:41",     "endDate" : "2019/01/10 10:38:41",     "deleteOnExpire":true,     "singleMembershipEndSystemGroups": "Registered Guests",     "multipleMembershipsEndSystemGroups": ["Servers","Blacklist"],     "custom1": "Text1",     "custom2": "Text2",</pre>

*Table continues...*

Register a device	
	<pre>"custom3": "Text3", "custom4": "Text4", "custom5": "Text5", "custom6":"" }} </pre>
	<p><b>Response Header</b></p> <pre>Content-Length: 0 Date: Thu, 25 Jun 2018 07:27:46 GMT Location: https://192.0.2.1/GIM/rest/devices/deviceDetails/AA-00-00-00-07-01 Server: Apache-Coyote/1.1 </pre>
	<p><b>Error Response</b></p> <pre>{   "error": {     "errorCode": "AUTHORIZATION_REQUIRED",     "msg": "Authorization required."   } }</pre>

## Variable Definition

The following table describes the parameters for the Device Registration API.

Attribute	Type/Value	Description
onboardingTemplate Name	String	Specifies the Onboarding Template name. The maximum length of the name must be 30 characters and the allowed characters are alphabets (upper and lower case), numbers (0 to 9) and special characters (# =() _- . ! [ ]).
macAddress	String	Specifies MAC Address of the device in the format xx:xx:xx:xx:xx:xx. For example, 0a:00:01:ab:a0:10
deviceName	String	Specifies the name of the device. The device name configuration depends on the Onboarding Template settings. The maximum length of the name must be 50 characters and the allowed characters are a-z A-Z 0-9!@#\$%^&* () +-
deviceTypeGroup	String	Specifies the device type group. It must match exactly with the defined device type group in the Access Control Engine. The device type group configuration depends on the Onboarding Template settings.
deviceType	String	Specifies the device type. It must match exactly with the defined device type in Access Control Engine. The device type configuration depends on the Onboarding Template settings.

*Table continues...*

Attribute	Type/Value	Description
enabled	Boolean	Specifies the device record status. Parameter and values are: <ul style="list-style-type: none"> <li>• If true, then device record is active.</li> <li>• if false, then device record is inactive.</li> </ul>
assetType	String	Specifies the asset type. The device record type can be PERMANENT or TEMPORARY.
startDate	String	Specifies start date. The format is yyyy/MM/dd HH:mm:ss (24 hours format) The start date configuration depends on the Onboarding Template settings. For example, 2018/01/10 10:30:41.
endDate	String	Specifies the expiry time of device. The format is yyyy/MM/dd HH:mm:ss (24 hours format). For example, 2018/11/10 15:30:41. endDate is validated against the maximum duration set in the Onboarding Template. <ul style="list-style-type: none"> <li>• If the endDate is not sent in the request, then the duration and durationUnit is considered for calculating the expiry time of the device.</li> <li>• If both the endDate and duration is not sent in the request, then the maximum duration set in the Onboarding Template is considered for calculating the expiry time of the device.</li> <li>• If both the endDate and duration are sent in the request, then the endDate is considered for calculating the expiry time of the device.</li> </ul>
durationUnit	String	Specifies the duration in hours, minutes and days. Accepted value input format is [HOURS:MINUTES:DAY]
duration	Int	Specifies the duration value. This value must not be more than the specified Onboarding Template maximum duration. The duration configuration depends on the Onboarding Template settings.
source	String	Specifies the source of the Device Record. The maximum length of the source value must be 50 characters.
deleteOnExpire	Boolean	Specifies whether the Device must be deleted on expiry. Accepted input values are true / false. The delete on expiry configuration depends on the Onboarding Template settings. <ul style="list-style-type: none"> <li>• If no value is sent, then deleteOnExpire is set to configured Onboarding Template default value for Non Permanent Records. For Permanent Records, it is set to false.</li> </ul>

*Table continues...*

Attribute	Type/Value	Description
singleMembershipEndSystemGroups	String	Specifies the Single Membership End System Group selected from the available list of Single Membership groups configured in the Onboarding Template. You can select only one Single Membership End System Group.  * <b>Note:</b> singleMembershipEndSystemGroups is mandatory if accessGroups are accessible to Provisioner and are configured in the Onboarding Template settings.
multipleMembershipsEndSystemGroups	Array	Specifies the Multiple Membership End System groups selected from the available list of Multiple Membership groups configured in the Onboarding Template. You can select multiple groups by separating them with a comma (,) and enclosing in square brackets ([ ]).  For example, ["Wired", "Wireless"].
custom1 to custom6	String	Specifies the values for custom attributes 1 to 6. The maximum length of the value must be 100 characters.

## Update a Device

Use this API to update a single Device with the specified MAC address.

\* **Note:**

An error response is sent if device has expired.

The Onboarding Template name associated with this Device cannot be modified. If this information is passed in the API, it is ignored.

Update a device	
<b>URI</b>	/rest/devices/{MAC}
<b>Method</b>	PUT
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	N/A

*Table continues...*

**Update a device****Example****Request**

```
PUT /GIM/rest/devices/10:0b:01:20:00:06 HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept: application/json
Content-Type: application/json
Cache-Control: no-cache
```

**Request Payload****JSON Format**

```
{
  "Device": {
    "deviceName": "devices",
    "deviceTypeGroup": "Android",
    "deviceType": "Nook",
    "enabled": true,
    "assetType": "TEMPORARY",
    "startDate" : "2019/01/10 10:30:41",
    "durationUnit" : "HOURS",
    "duration" : 5,
    "deleteOnExpire": true,
    "singleMembershipEndSystemGroups": "Registered Guests",
    "multipleMembershipsEndSystemGroups": ["Servers", "Blacklist"],
    "custom1": "Text1",
    "custom2": "Text2",
    "custom3": "Text3",
    "custom4": "Text4",
    "custom5": "Text5",
    "custom6": "Text6"
  }
}
```

**Error Response**

```
{
  "error": {
    "errorCode": "INVALID_RECORD",
    "msg": {
      "deviceTypeGroup": "Invalid Device Type Group: Anroid. Not
Applicable for the specified Onboarding Template",
      "endDate": "Invalid Format for End Date",
      "assetType": "Asset Type can be either Temporary or Permanent",
      "deleteOnExpire": "Invalid Delete on Expire Value. Allowed
Values: true/false"
    }
  }
}
```

For more information on the variable definitions, see [Variable Definition](#) on page 42.

**Error Cases**

The following table describes the error cases for updating device with the specified MAC address.

Error Case	Response Code	Error Response
Device does not exist	404 not found	errorCode: NOT_FOUND

*Table continues...*

Error Case	Response Code	Error Response
		msg: Device Record Not Found
Device access denied	400 Bad Request	errorCode: DEVICE_ACCESS_DENIED  msg: Your account does not have permission to access the Device: {macAddress}.  If Provisioners can access each other's record, then it allows them editing of the device by the other provisioner and update <b>provisionedBy</b> field.
Device already expired	400 Bad Request	errorCode: DEVICE_EXPIRED  msg: Device record already expired.

## Delete a Device

Use this API to delete a single device with the specified MAC address.

Delete a device	
<b>URI</b>	/rest/devices/{MAC}
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption)  Authorization: username:password  api-version:{VERSION}  Accept: application/json  Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Device record deleted successfully.
<b>Example</b>	<b>Request</b>  DELETE /GIM/rest/devices/10:0b:01:20:00:06 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-type: application/json Cache-Control: no-cache

## Error Cases

The following table describes the error cases for deleting a device record for a MAC.

Error Case	Response Code	Error Response
Device does not exist	404 not found	errorCode: NOT_FOUND
Device access denied	400 Bad Request	errorCode: DEVICE_ACCESS_DENIED msg: Your account does not have permission to access the Device: {macAddress}. If Provisioner can access each other's record in this Onboarding Template then allow to delete the device.

## Deleting Multiple Devices

Use this API to delete multiple devices.

**\* Note:**

A maximum of 1000 devices can be deleted.

Deleting multiple devices	
<b>URI</b>	/rest/devices
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Failure List of MAC Addresses or Generic Message of Operation Failure or Success
<b>Example</b>	<p><b>Request</b></p> <pre>DELETE /GIM/rest/devices HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-type: application/json Cache-Control: no-cache</pre> <p><b>Request Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "10:0b:01:20:00:06"       },       {         "macAddress": "10:10:10:00:00:02"       }     ]   } }</pre>

*Table continues...*

Deleting multiple devices
<pre>                 ]             }         }     } </pre> <p><b>Response Payload</b></p> <p>If all the Devices are deleted successfully:</p> <pre> {   "Message": "All Devices are deleted successfully" } </pre> <p>If the Provisioner does not have the permission to delete some of the devices in the list, or the Device is not found:</p> <pre> {   "message": "Unable to Delete the following Devices. Please check Failure List for Details",   "failureList": {     "Device": [       {         "macAddress": "10:10:10:00:00:06",         "reason": "ERROR-RecordNotFound"       },       {         "macAddress": "10:10:10:00:00:02",         "reason": "ERROR-AccessDenied"       }     ]   } } </pre> <p>If the operation fails:</p> <pre> {   "Message": "Devices Delete Operation Failed. Please retry." } </pre>

## Bulk Delete of Devices for a Provisioner

Use this API to delete all devices of a provisioner (bulk delete).

Bulk Delete of Devices for a Provisioner	
<b>URI</b>	/rest/devices/prov/bulkDelete
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK


*Table continues...*



Bulk Delete of Devices for a Provisioner	
<b>Response Payload</b>	Success or failure message.
<b>Example</b>	<p><b>Request</b></p> <pre>DELETE /GIM/rest/devices/prov/bulkDelete HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-type: application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <p>If the operation is successful:</p> <pre>{   "message": "All Devices are deleted successfully." }</pre> <p>If the operation fails:</p> <pre>{   "message": "Devices Delete Operation Failed. Please retry." }</pre>

## Fetching Device Details by MAC for a Provisioner

Use this API to query Device details by MAC for a Provisioner.

Fetching Device Details by MAC for a Provisioner	
<b>URI</b>	/rest/devices/deviceDetails/{MAC}?viewAll=true
	<p> <b>Note:</b></p> <p>viewAll is a Boolean data type, which takes a value of either true or false.</p> <p>If the value is true and in the onboarding template, if the <b>Provisioners belonging to this Onboarding Template can view all records of this GIM Domain</b> checkbox is selected, then the provisioner can view any record.</p> <p>If the value is false then the provisioner can only view those records created by the provisioner.</p>
<b>Method</b>	GET
<b>HTTP Headers</b>	<pre>Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json</pre>
<b>Response Code</b>	200 OK

*Table continues...*

Fetching Device Details by MAC for a Provisioner	
<b>Response Payload</b>	Device Details by MAC for a provisioner
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices/deviceDetails/AA:66:97:60:89:97 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "Device": {     "macAddress": "AA:66:97:60:89:97",     "deviceName": "devicetest",     "deviceTypeGroup": "Android",     "deviceType": "Nook",     "source": "GIM-api-device-OT",     "enabled": true,     "assetType": "TEMPORARY",     "startDate": "2019/01/10 10:30:41",     "endDate": "2019/01/10 10:38:41",     "onboardingTemplate": "api-device-OT",     "provisioner": "ProvTest",     "deleteOnExpire": true   } }</pre>

## Variable Definition

The following table describes the parameters for Device record details.

Attribute	Type/Value	Description
macAddress	String	Specifies the MAC address. The format is xx:xx:xx:xx:xx:xx
deviceName	String	Specifies the Device name.
deviceTypeGroup	String	Specifies the Device Type Group.
deviceType	String	Specifies the source of the Device.
source	String	Specifies the Device Type.
enabled	Boolean	Specifies the Device record status. Parameter and values are: <ul style="list-style-type: none"> <li>• if true, then Device record is active.</li> <li>• if false, then Device record is inactive.</li> </ul>
assetType	String	Specifies the asset type. The Device record type can be PERMANENT or TEMPORARY.

*Table continues...*

Attribute	Type/Value	Description
startDate	String	Specifies the Device start date and time.  The format is YYYY/MM/DD for start date and HH:mm:ss for time.  For example, 2018/06/06 11:10:00.
endDate	String	Specifies the Device end date and time. If the assetType is PERMANENT or end time is not enabled (first login), then value is '-'.  The format is YYYY/MM/DD for start date and HH:mm:ss for time.  For example, 2018/06/06 18:10:00.
onboardingTemplate	String	Specifies the Onboarding Template.
provisioner	String	Specifies the username of the Provisioner who registered / last updated the Device.
deleteOnExpire	String	Specifies whether the Device must be deleted on expiry.
singleMembershipEndSystemGroups	String	Specifies the Single Membership End System Groups the Device belongs to.
multipleMembershipsEndSystemGroups	Array	Specifies the Multiple Membership End System Groups the Device belongs to.
custom1 to custom 6	String	Specifies the values for custom attributes 1 to 6.

---

## Fetching Devices Iteratively for a Provisioner

Use this procedure to fetch devices iteratively for a Provisioner. Single Membership and Multiple Membership End System Groups will not be part of the Response Payload. You need to use the procedure [Fetching Device Details by MAC for a Provisioner](#) on page 41 to view the Access Groups the Device belongs to.

1. Get the next N devices. For more information, see [GET next N Devices](#) on page 44.
2. Get the first N devices. For more information, see [GET first N Devices](#) on page 46.
3. Get the last N devices. For more information, see [GET last N Devices](#) on page 47.

4. Get a count of the total available device records. For more information, see [GET Count of Total Available Device Records](#) on page 49

**\* Note:**

The value for N can range from 1 to 500.

## GET next N Devices

Use this API call to get the next set of N devices from a start index, with or without details.

GET next N Devices	
<b>URI</b>	<p>/rest/devices/next?start=&lt;start_index&gt;&amp;limit={N}</p> <p><b>To get the next N Devices without details, use:</b></p> <p>/rest/devices?start={start-index}&amp;limit={N}&amp;hideDetails=true</p> <p><b>* Note:</b></p> <ul style="list-style-type: none"> <li>• if hideDetails=true then Response does not contain the device details.</li> <li>• if hideDetails=false or if this parameter is not specified, then the Response contains the device details. This is the default.</li> </ul>
<b>Method</b>	GET
<b>HTTP Headers</b>	<p>Authorization Scheme: Basic (Base64 encryption)</p> <p>Authorization: username:password</p> <p>api-version:{VERSION}</p> <p>Accept: application/json</p>
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Device List
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices?start=12&amp;limit=2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "10:0b:01:20:00:12",         "deviceName": "device-android",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",         "source": "GM-p-api-user-device",</pre>

*Table continues...*

**GET next N Devices**

```

        "enabled": true,
        "assetType": "PERMANENT",
        "startDate": "2018/06/17 04:47:21",
        "endDate": "-",
        "onboardingTemplate": "api-device-OT",
        "provisioner": "pall",
        "deleteOnExpire": true,
        "custom1": "text1",
        "custom2": "text2",
        "custom3": "text3",
        "custom4": "text4",
        "custom5": "text5",
        "custom6": "text6",
    },
    {
        "macAddress": "10:10:10:00:00:13",
        "deviceName": "device1",
        "deviceTypeGroup": "mobile",
        "deviceType": "generic-android",
        "source": "GM-p-api-user-device",
        "enabled": true,
        "assetType": "PERMANENT",
        "startDate": "2018/06/24 07:13:53",
        "endDate": "-",
        "onboardingTemplate": "api-device-OT",
        "provisioner": "pall",
        "deleteOnExpire": true,
        "custom1": "text1",
        "custom2": "text2",
        "custom3": "text3",
        "custom4": "text4",
        "custom5": "text5",
        "custom6": "text6",
    }
]
}
}

```

**Request without device details**

```

GET /GIM/rest/devices?start=0&limit=2&hideDetails=true HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept: application/json
Cache-Control: no-cache

```

**Response Payload without device details**

```

{
  "DeviceList": {
    "Device": [
      {
        "macAddress": "10:0b:01:20:00:12"
      },
      {
        "macAddress": "10:10:10:00:00:13"
      }
    ]
  }
}

```

## GET first N Devices

Use this API call to get the first N devices, with or without details.

GET first N devices	
<b>URI</b>	<p>/rest/devices/first?limit={N}</p> <p><b>To get the first N Devices without details, use:</b></p> <p>/rest/devices?limit={N}&amp;hideDetails=true</p> <p><b>* Note:</b></p> <ul style="list-style-type: none"> <li>• if hideDetails=true then Response does not contain the device details.</li> <li>• if hideDetails=false or if this parameter is not specified, then the Response contains the device details. This is the default.</li> </ul>
<b>Method</b>	GET
<b>HTTP Headers</b>	<p>Authorization Scheme: Basic (Base64 encryption)</p> <p>Authorization: username:password</p> <p>api-version:{VERSION}</p> <p>Accept: application/json</p>
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Device List
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices?limit=2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "10:0b:01:20:00:01",         "deviceName": "device-android",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",         "source": "GM-p-api-user-device",         "enabled": true,         "assetType": "PERMANENT",         "startDate": "2018/06/17 04:47:21",         "endDate": "-",         "onboardingTemplate": "api-device-OT",         "provisioner": "pall",         "deleteOnExpire": true,         "custom1": "text1",         "custom2": "text2",         "custom3": "text3",</pre>

*Table continues...*

**GET first N devices**

```

        "custom4": "text4",
        "custom5": "text5",
        "custom6": "text6",
    },
    {
        "macAddress": "10:10:10:00:00:02",
        "deviceName": "device1",
        "deviceTypeGroup": "mobile",
        "deviceType": "generic-android",
        "source": "GM-p-api-user-device",
        "enabled": true,
        "assetType": "PERMANENT",
        "startDate": "2018/06/24 07:13:53",
        "endDate": "-",
        "onboardingTemplate": "api-device-OT",
        "provisioner": "pall",
        "deleteOnExpire": true,
        "custom1": "text1",
        "custom2": "text2",
        "custom3": "text3",
        "custom4": "text4",
        "custom5": "text5",
        "custom6": "text6",
    }
  ]
}

```

**Request without device details**

```

GET /GIM/rest/devices?limit=2&hideDetails=true HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept:application/json
Cache-Control: no-cache

```

**Response Payload without device details**

```

{
  "DeviceList": {
    "Device": [
      {
        "macAddress": "10:0b:01:20:00:01"
      },
      {
        "macAddress": "10:10:10:00:00:02"
      }
    ]
  }
}

```

## GET last N Devices

Use this API call to get the last N devices, with or without details.

**GET last N Devices**

<b>URI</b>	/rest/devices/last?limit={N}
------------	------------------------------

**To get the last N Devices without details, use:**

*Table continues...*

<b>GET last N Devices</b>	
	<p>/rest/devices?limit={N}&amp;hideDetails=true</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• if hideDetails=true then Response does not contain the device details.</li> <li>• if hideDetails=false or if this parameter is not specified, then the Response contains the device details. This is the default.</li> </ul>
<b>Method</b>	GET
<b>HTTP Headers</b>	<p>Authorization Scheme: Basic (Base64 encryption)</p> <p>Authorization: username:password</p> <p>api-version:{VERSION}</p> <p>Accept: application/json</p>
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Device List
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices?limit=2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "10:0b:01:20:00:20",         "deviceName": "device-android",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",         "source": "GM-p-api-user-device",         "enabled": true,         "assetType": "PERMANENT",         "startDate": "2018/06/17 04:47:21",         "endDate": "-",         "onboardingTemplate": "api-device-OT",         "provisioner": "pall",         "deleteOnExpire": true,         "custom1": "text1",         "custom2": "text2",         "custom3": "text3",         "custom4": "text4",         "custom5": "text5",         "custom6": "text6",       },       {         "macAddress": "10:10:10:00:00:21",         "deviceName": "device1",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",</pre>

Table continues...



**GET last N Devices**

```

        "source": "GM-p-api-user-device",
        "enabled": true,
        "assetType": "PERMANENT",
        "startDate": "2018/06/24 07:13:53",
        "endDate": "-",
        "onboardingTemplate": "api-device-OT",
        "provisioner": "pall",
        "deleteOnExpire": true,
        "custom1": "text1",
        "custom2": "text2",
        "custom3": "text3",
        "custom4": "text4",
        "custom5": "text5",
        "custom6": "text6",
      }
    ]
  }
}

```

**Request without device details**

```

GET /GIM/rest/devices?limit=2&hideDetails=true HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept:application/json
Cache-Control: no-cache

```

**Response Payload without device details**

```

{
  "DeviceList": {
    "Device": [
      {
        "macAddress": "10:0b:01:20:00:20"
      },
      {
        "macAddress": "10:10:10:00:00:21"
      }
    ]
  }
}

```

## GET Count of Total Available Device Records

Use this API call to get the total count of device records of a Provisioner.

<b>GET count of total available device records</b>	
<b>URI</b>	/rest/devices/count
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK

*Table continues...*

GET count of total available device records	
<b>Response Payload</b>	Count of Device Records
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices/count HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <p>4</p>


## Error Cases

The following table describes the Error cases for fetching devices iteratively for a Provisioner.

Error Case	Response Code	Error Response
Invalid start index	400 Bad Request	errorCode: INVALID_START_INDEX  msg: Invalid start index: Missing or contains invalid value.
Invalid limit	400 Bad Request	errorCode: INVALID_LIMIT  msg: Invalid limit. Please specify a value in the range 1 to 500.
No record found	204 No content	errorCode:NO_RECORD_FOUND  msg: No records match the provided criteria.

## Fetching Devices Based on Filter Criteria

Use this API to fetch devices based on filter criteria. Single and Multiple Membership End System Groups will not be part of the Response Payload. You need to use the procedure [Fetching Device Details by MAC for a Provisioner](#) on page 41 to view the Access Groups the Device belongs to.

Fetch devices based on filter criteria	
<b>URI</b>	<pre>/rest/devices?field=&lt;field-name&gt;&amp;oper=&lt;filter-option&gt;&amp;value=&lt;value&gt;&amp;limit={N}&amp;start=&lt;start_index&gt;</pre> <p> <b>Note:</b></p> <p>The value for N can range from 1 to 500. The value for start_index can be any positive number. By default, the value is 0.</p>
<b>Method</b>	GET

*Table continues...*

Fetch devices based on filter criteria	
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	A list of devices that match the filter criteria.
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices? field=deviceName&amp;oper=startsWith&amp;value=Test&amp;limit=2 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-Type:application/json</pre> <p><b>Response Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "11:11:11:11:11:12",         "deviceName": "Test1",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",         "source": "GM-default",         "enabled": true,         "assetType": "PERMANENT",         "startDate": "2018/11/09 09:24:45",         "endDate": "-",         "onboardingTemplate": "default",         "provisioner": "as"         "deleteOnExpire": true,         "custom1": "text1",         "custom2": "text2",         "custom3": "text3",         "custom4": "text4",         "custom5": "text5",         "custom6": "text6",       },       {         "macAddress": "11:11:11:11:11:13",         "deviceName": "Test2",         "deviceTypeGroup": "mobile",         "deviceType": "generic-android",         "source": "GM-default",         "enabled": true,         "assetType": "TEMPORARY",         "startDate": "2018/10/13 02:22:31",         "endDate": "2018/10/13 10:22:31",         "onboardingTemplate": "default",</pre>

Table continues...

```

Fetch devices based on filter criteria
{
  "provisioner": "as"
  "deleteOnExpire": true,
  "custom1": "text1",
  "custom2": "text2",
  "custom3": "text3",
  "custom4": "text4",
  "custom5": "text5",
  "custom6": "text6",
}
]
}

```

### Filter Criteria for a Device

The following table describes the filter criteria for a Device:

Filter Criteria	Options	Value Type	Description
macAddress	equals notEquals startsWith endsWith contains	String	MAC address
deviceName	equals notEquals startsWith endsWith contains	String	Device name
source	equals notEquals startsWith endsWith contains	String	Device source
deviceTypeGroup	equals notEquals startsWith endsWith contains	String	Device Type Group
startDate	greaterThan greaterThanEqual	Date Format: YYYY/MM/DD hh:mm:ss A zone-name	Start Time of Device activation

*Table continues...*

Filter Criteria	Options	Value Type	Description
	lessThan lessThanEqual	Eg: 2018/09/08 10:10:22 AM Asia/Kolkata  * <b>Note:</b> Special characters in the zone name, if any, must be encoded.	
endDate	greaterThan greaterThanEqual lessThan lessThanEqual	Date Format: YYYY/MM/dd hh:mm:ss A zone-name Eg: 2018/09/08 10:10:22 AM Asia/Kolkata  * <b>Note:</b> Special characters in the zone name, if any, must be encoded.	Expiry time of device
onboardingTemplate	equals	String	Onboarding Template name  * <b>Note:</b> The Provisioner must have access to the Onboarding Template and have device rights.

## Fetching Devices Custom Labels

Use this API to fetch the Custom Labels for a device.

Fetching device custom labels	
<b>URI</b>	/rest/devices/getCustomLabels
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json

*Table continues...*


Fetching device custom labels	
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Custom Labels for a specific device.
<b>Example</b>	<p><b>Request</b></p> <pre>GET /rest/devices/getCustomLabels HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-Type: application/json</pre> <p><b>Response Payload</b></p> <pre>{   "deviceCustomLabel1": {     "en": "Model Number",     "fr": "",     "it": ""   },   "deviceCustomLabel2": {     "en": "Brand Name",     "fr": "",     "it": ""   },   "deviceCustomLabel3": {     "en": "Manufacturing Country",     "fr": "",     "it": ""   },   "deviceCustomLabel4": {     "en": "City",     "fr": "",     "it": ""   },   "deviceCustomLabel5": {     "en": "Display Size",     "fr": "",     "it": ""   },   "deviceCustomLabel6": {     "en": "Device Operating System",     "fr": "",     "it": ""   } }</pre>

## API to Query the Status of Single Device

Use this API to query the status of a single device to check whether the device exists or its status is expired.


Query the status of single device	
<b>URI</b>	/rest/devices/deviceStatusQuery/{MAC}

*Table continues...*

Query the status of single device	
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Status of a device  <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"></div> <div> <p><b>Note:</b></p> <p>The status of a device can be one of the following:</p> <ul style="list-style-type: none"> <li>• FOUND - if device exists.</li> <li>• NOT_FOUND - if device does not exist.</li> <li>• FOUND_BUT_EXPIRED - if device exists but expired.</li> </ul> </div> </div>
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices/deviceStatusQuery/10:0b:01:20:00:06 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "Device": {     "macAddress": "10:0b:01:20:00:06",     "status": "NOT_FOUND"   } }</pre>

## API to Query the Status of Multiple Devices

Use this API to query the status of multiple devices to check whether they exist, or their status is expired.

Query the status of multiple devices	
<b>URI</b>	/rest/devices/deviceStatusQuery?macs={mac1 mac2 mac3 ... macN}
	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"></div> <div> <p><b>Note:</b></p> <p>  is a separator between the MAC addresses. A maximum of 100 MAC addresses can be passed in the query.</p> </div> </div>
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption)

*Table continues...*

Query the status of multiple devices	
	<pre>Authorization: username:password api-version:{VERSION} Accept: application/json</pre>
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Device status for multiple devices.
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/devices/deviceStatusQuery?macs=12:00:00:00:00:01  12:00:00:00:00:02 12:00:00:00:00:03 12:00:00:00:00:04:00:00 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "DeviceList": {     "Device": [       {         "macAddress": "12:00:00:00:00:01",         "status": "NOT_FOUND"       },       {         "macAddress": "12:00:00:00:00:02",         "status": "FOUND"       },       {         "macAddress": "12:00:00:00:00:03",         "status": "FOUND_BUT_EXPIRED"       },       {         "macAddress": "12:00:00:00:00:04:00:00",         "status": "INVALID_MACADDRESS"       }     ]   } }</pre>

---

## Guest User Operations

The following sections describe the create, read, update, and delete (CRUD) API operations with respect to a Guest User.

---

### Guest User Registration

This API allows the Provisioner to add a Guest User to the Guest and IoT Manager.



**\* Note:**

If the Account Expiration is set to Permanent in the Onboarding Template for the logged in Provisioner, the Guest User Account created will be a Permanent account and will not expire. The Delete on Expire flag will be set to false.

If the User is permanent and you provide the end date, duration, duration units in request pay load, then these attributes are ignored while creating / modifying the Guest User account.

Guest User Registration REST API	
<b>URI</b>	/rest/guestUsers
<b>Method</b>	POST
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption)  Authorization: username:password  api-version:{VERSION}  Accept: application/json  Content-Type: application/json
<b>Response Code</b>	201 Created
<b>Response Payload</b>	Guest User Details
<b>Example</b>	<p><b>Request</b></p> <pre>POST /GIM/rest/guestUsers HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Content-Type: application/json Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Request Payload</b></p> <p><b>JSON Format</b></p> <pre>"GuestUser":{ "onboardingTemplateName" : "api-User-OT", "firstName" : "John", "lastName" : "Simpson", "loginId" : "guestUser1", "password" : "Test@123", "email" : "test@extremenetworks.com", "mobilephone" : "1123444455", "phoneCarrier" : "T-Mobile", "startDate" : "2019/09/21 1:16:41", "endDate":"2019/09/21 5:16:41", "multipleMembershipsUserGroups":["Student","Visitor"], "singleMembershipUserGroups":"Employee", "deleteOnExpire":true, "enabled":true, "custom1": "Text1", "custom2": "Text2",</pre>

*Table continues...*

Guest User Registration REST API	
	<pre>"custom3": "Text3", "custom4": "Text4", "custom5": "Text5", "custom6":"" }} </pre>
	<p><b>Response Header</b></p> <pre>Connection → close Content-Type → application/json Date → Thu, 25 Jun 2018 07:10:48 GMT Location → https://192.0.2.1/GIM/rest/guestUsers/guestUserDetails/guestUser1 Transfer-Encoding → chunked </pre>
	<p><b>Response Payload</b></p> <pre>{   "GuestUser": {     "userName": "guestUser1",     "password": "Test@12",     "email": "test@extremenetworks.com",     "smsAddress": "1123444455@tmomail.net"   } } </pre>
	<p><b>Error Response</b></p> <pre>{   "error": {     "errorCode": "AUTHORIZATION_REQUIRED",     "msg": "Authorization required."   } } </pre>


## Variable Definition

The following table describes the parameters of a Request Guest User and a Response Guest User.

### Request Guest User

Attribute	Type/Value	Description
onboardingTemplateName	String	Specifies the onboarding template name. The maximum length of the name must be 30 characters and the allowed characters are alphabets (upper and lower case), numbers (0 to 9) and special characters (# = () _ - . ! []).
loginId	String	Specifies the guest account username. The maximum length of the username can be 30 characters. The allowed characters are alphabets (upper and lower case), numbers (0 to 9), and special characters (hyphen and underscore).  The guest account username configuration depends on the following Onboarding Template settings. Parameter and value is:  If the parameter value for userNameAccessible is true, then the username is mandatory. Else, it is optional and value is ignored.
firstName	String	Specifies first name of the Guest User. The maximum length of the first name can be 30 characters. The allowed characters are


*Table continues...*

Attribute	Type/Value	Description
		<p>alphabets (upper and lower case), numbers (0 to 9), and special characters (hyphen, underscore and single quote).</p> <p>The Guest User first name configuration depends on the following Onboarding Template settings. Parameters and values are:</p> <ul style="list-style-type: none"> <li>• If firstAndLastNameAccessible is true, then first name value is used, otherwise it is ignored.</li> <li>• If firstAndLastNameRequired is true, then first name is mandatory, otherwise it is optional.</li> </ul>
lastName	String	<p>Specifies last name of the Guest User. The maximum length of the last name can be 30 characters. The allowed characters are alphabets (upper and lower case), numbers (0 to 9), and special characters (hyphen, underscore and single quote).</p> <p>The Guest User last name configuration depends on the following Onboarding Template settings. Parameters and values are:</p> <ul style="list-style-type: none"> <li>• If firstAndLastNameAccessible is true, then last name value is used, otherwise it is ignored.</li> <li>• If firstAndLastNameRequired is true, then last name is mandatory, otherwise it is optional.</li> </ul>
email	String	<p>Specifies valid email address of the Guest User.</p> <p>The Guest User email address configuration depends on the following Onboarding Template settings. Parameter and value is:</p> <ul style="list-style-type: none"> <li>• If emailRequired is true, then email is mandatory, otherwise it is optional.</li> </ul>
password	String	<p>Specifies the password of the Guest User. It is Base64 encrypted.</p> <p>The guest password configuration depends on the following Onboarding Template settings. Parameter and value is:</p> <ul style="list-style-type: none"> <li>• If passwordAccessible is true, then mandatory, otherwise it is optional and value ignored.</li> </ul> <p> <b>Note:</b> Password must follow password complexity defined in Onboarding Template Setting.</p>
mobilephone	String (Valid Mobile Phone)	<p>Specifies the valid mobile phone number of the Guest User. The valid length depends on the phone Carrier specified.</p> <p>The guest mobile phone number configuration depends on the following Onboarding Template settings. Parameter and value is:</p> <p>If mobilePhoneRequired is true, then mobile phone is mandatory, otherwise it is optional.</p>
phoneCarrier	String (Carrier Name)	Specifies the valid carrier name. Valid only if it is registered in SMS Gateways under Administrator Notification settings in Guest and IoT

*Table continues...*

Attribute	Type/Value	Description
		Manager. Required if the <b>mobilephone</b> field is not empty and no default Gateway is configured in the Guest and IoT Manager.
startDate	String	Specifies start date. The format is yyyy/MM/dd HH:mm:ss (24 hours format).  The start date configuration depends on the following Onboarding Template settings.
durationUnit	String	Specifies the duration in hours, minutes and days.  Accepted value input format is [HOURS:MINUTES:DAYs]
duration	Long	Specifies the duration value. This value must not be more than the specified Onboarding Template maximum duration.  The duration configuration depends on the following Onboarding Template settings. Parameter and value is:  <ul style="list-style-type: none"> <li>• If accountExpirationAccessible is true, then the duration and durationUnit value is used, otherwise it is ignored.</li> </ul>
endDate	String	Specifies the expiry time of Guest User. The format is yyyy/MM/dd HH:mm:ss (24 hours format).  For example, 2018/11/10 15:30:41.  End date is validated against the maximum duration set in the Onboarding Template.  <ul style="list-style-type: none"> <li>• If the endDate is not sent in the request, then the duration and durationUnit is considered for calculating the expiry time of the Guest User account.</li> <li>• If both the endDate and duration is not sent in the request, then the maximum duration set in the Onboarding Template is considered for calculating the expiry time of the Guest User account.</li> <li>• If both the endDate and duration are sent in the request, then the endDate is considered for calculating the expiry time of the Guest User account.</li> </ul>
deleteOnExpire	Boolean	Specifies whether the Guest User Account must be deleted on Expiry. Accepted input values are true / false. The delete on Expiry configuration depends on the Onboarding Template Settings. Parameter and values is:  <ul style="list-style-type: none"> <li>• If no value is sent, then deleteOnExpire is set to configured Onboarding Template default value for Non Permanent Records. For Permanent Records, it is set to false.</li> </ul>
enabled	Boolean	Specifies the Guest User account status. Parameter and values are:  <ul style="list-style-type: none"> <li>• If true, then Guest User account is active.</li> <li>• if false, then Guest User account is inactive.</li> </ul>
singleMembershipUserGroups	String	Specifies the Single Membership User Group selected from the available list of single membership groups configured in the

*Table continues...*

Attribute	Type/Value	Description
		Onboarding Template. You can select only one Single Membership User group.   <b>Note:</b> singleMembershipUserGroups is mandatory if accessGroups are accessible to Provisioner and are configured in the Onboarding Template settings.
multipleMembershipsUserGroups	Array	Specifies the Multiple Membership User Groups selected from the available list of Multiple Membership Groups configured in the Onboarding Template. You can specify multiple user groups by separating them with a comma (,) and enclosing them in square brackets ([ ]).  For Example, ["Wired", "Wireless"].
custom1 to custom 6	String	Specifies the values for custom attributes 1 to 6. The maximum length of the value must be 100 characters.

### Response Guest User

Attribute	Type/Value	Description
userName	String	Specifies the username of Guest User account.  If displayUserName is true, then username value appears, otherwise "-" appears.
password	String	Specifies the password of Guest User account.  If displayPassword is true, then password value appears, otherwise "-" appears.
email	String	Specifies email address of the Guest User account.
smsAddress	String	Specifies SMS Address of the Guest User account. The format is mobilephone@gateway. For example, 2991199112@tmomail.net.

## Re-send Credentials Through EMAIL/SMS to Guest User by Username

Use this API to enable the Guest and IoT Manager to send E-MAIL/SMS notification of login credentials to a Guest User. The option E-MAIL/SMS is enabled by checking the checkbox in the Onboarding Template. A NOTIFICATION\_ERROR is sent if the EMAIL/SMS notifications are not enabled.

Re-send Credentials through EMAIL/SMS to Guest User by Username	
<b>URI</b>	/rest/guestUsers/resendCredentials/{username}
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption)

*Table continues...*

Re-send Credentials through EMAIL/SMS to Guest User by Username	
	<pre>Authorization: username:password api-version:{VERSION} Accept: application/json</pre>
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Notification Sent Successfully
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/guestUsers/resendCredentials/guestUser1 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre>

## Error Cases

Error Case	Response Code	Error Response
Guest User does not exist	404 not found	<pre>errorCode: NOT_FOUND msg: Guest User Record Not Found .</pre>
Guest User exists but Email and SMS address empty	400 Bad Request	<pre>errorCode: NOTIFICATION_ERROR msg: Could not send notification. Cause: Guest User Email/SMS address empty.</pre>
Guest User exists but Email and SMS notification off in Onboarding Template	400 Bad Request	<pre>errorCode: NOTIFICATION_ERROR msg: Could not send notification. Cause: Access Denied.</pre>
Email Notification disabled	400 Bad Request	<pre>errorCode: NOTIFICATION_ERROR msg: EmailError: Email not enabled. Please contact Administrator.</pre>

## Update a Guest User

Use this API to update a Guest User that has the specified username.

 **Note:**

An error response is sent if the Guest User account has expired. You will need to delete the account and recreate it.

The Onboarding Template Name associated with this Guest User cannot be modified. If this information is passed in the API, it is ignored.

If the Account Expiration is set to Permanent in the Onboarding Template for the logged in Provisioner, the created Guest User account will be a Permanent account and will not expire. The “Delete on Expire” flag is set to false.

If the Guest User is permanent and you provide the `end date`, `duration`, `duration units` in the request pay load, then these attributes are ignored when creating or modifying the Guest User account.

Update a Guest User	
<b>URI</b>	/rest/guestUsers/{username}
<b>Method</b>	PUT
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Guest User record updated successfully.
<b>Example</b>	<p><b>Request</b></p> <pre>PUT /GIM/rest/guestUsers/guestUser1 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-type: application/json</pre> <p><b>Request Payload</b></p> <p><b>JSON</b></p> <pre>"GuestUser":{   "firstName" : "John",   "lastName" : "Simpson",   "loginId" : "guestUser1",   "password" : "Abc@12",   "email" : "test@extremenetworks.com",   "mobilephone" : "1123444455",   "phoneCarrier" : "T-Mobile",   "startDate" : "2019/09/23 1:16:41",   "endDate":"2019/09/23 5:16:41",   "multipleMembershipsUserAccessGroups":["Student","Visitor"],   "singleMembershipUserAccessGroups":"Employee",   "deleteOnExpire":true,   "enabled":true,   "custom1": "Text1",   "custom2": "Text2",</pre>

*Table continues...*

```

Update a Guest User

"custom3": "Text3",
"custom4": "Text4",
"custom5": "Text5",
"custom6": "Text6"
}
}

Response Payload

{
  "GuestUser": {
    "userName": "guestUser1",
    "password": "Abc@12",
    "email": "test@extremenetworks.com",
    "smsAddress": "1123444455@tmomail.net"
  }
}

Error Response

{
  "error": {
    "errorCode": "INVALID_RECORD",
    "msg": {
      "email": "Invalid Email Address Format",
      "startDate": "Start Date less than Current Date"
    }
  }
}

```

For more information on the variable definitions, see [Variable Definition](#) on page 70.

## Error Cases

The following table describes the error cases when updating a Guest User that has the specified username:

Error Case	Response Code	Error Response
Guest User does not exist	404 not found	errorCode: NOT_FOUND msg: Guest User Record Not Found.
Guest User access denied	400 Bad Request	errorCode: GUEST_USER_ACCESS_DENIED msg: Your account does not have the permission to access the Guest User: <username>.  If Provisioner can access each other's record, then allow to edit the Guest User account by other provisioner and update <b>provisionedBy</b> field.

*Table continues...*



Error Case	Response Code	Error Response
Guest User record already expired	400 Bad Request	errorCode: GUEST_USER_EXPIRED  msg: Guest User already expired.

## Delete a Guest User

Use this API to delete a single Guest User with the specified username.

Delete a Guest User	
<b>URI</b>	/rest/guestUsers/{username}
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption)  Authorization: username:password  api-version:{VERSION}  Accept: application/json  Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Guest User record deleted successfully
<b>Example</b>	<b>Request</b>  DELETE /GIM/rest/guestUsers/guestUser2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-type: application/json

## Error Cases

The following table describes the error cases for deleting a Guest User for a username:

Error Case	Response Code	Error Response
Guest user does not exist	404 not found	errorCode: NOT_FOUND  msg: Guest User Record Not Found.
Guest User access denied	400 Bad Request	errorCode: GUEST_USER_ACCESS_DENIED  msg: Your account does not have permission to access the Guest User: {0}.

*Table continues...*

Error Case	Response Code	Error Response
		If Provisioner can access each other's record, then allow to delete the Guest User.

## Deleting Multiple Guest Users

Use this API to delete multiple Guest Users.

**\* Note:**

A maximum of 1000 Guest Users can be deleted.

Deleting Multiple Guest Users	
<b>URI</b>	/rest/guestUsers
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Failure List of Usernames or Generic Message of Operation Failure or Success
<b>Example</b>	<p><b>Request</b></p> <pre>DELETE /GIM/rest/guestUsers HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-type: application/json</pre> <p><b>Request Payload</b></p> <pre>{   "GuestUserList": {     "GuestUser": [       {         "userName": "user1"       },       {         "userName": "user2"       },       {         "userName": "user3"       },       {         "userName": "user4"       }     ]   } }</pre>

*Table continues...*

**Deleting Multiple Guest Users**

```

    }
  ]
}

```

**Response Payload**

If all the Guest Users are deleted successfully:

```

{
  "Message": "All Guest Users are deleted successfully"
}

```

If the Provisioner does not have the permission to delete some of the Guest Users in the list, or the Guest User is not found:

```

{
  "message": "Unable to Delete the following Guest Users. Please
check Failure List for Details",
  "failureList": {
    "GuestUser": [
      {
        "userName": "User1",
        "reason": "ERROR-RecordNotFound"
      },
      {
        "userName": "User2",
        "reason": "ERROR-AccessDenied"
      },
      {
        "userName": "empty",
        "reason": "ERROR-InvalidUserName"
      }
    ]
  }
}

```

If the delete operation fails:

```

{
  "Message": "Guest Users Delete Operation Failed. Please retry."
}

```

## Bulk Delete of Guest Users for a Provisioner

Use this API to delete all the Guest Users of a provisioner (bulk delete).

Bulk Delete of Guest Users for a Provisioner	
<b>URI</b>	/rest/guestUsers/prov/bulkDelete
<b>Method</b>	DELETE
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION}

*Table continues...*

Bulk Delete of Guest Users for a Provisioner	
	Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Success or failure message.
<b>Example</b>	<p><b>Request</b></p> <pre>DELETE /GIM/rest/guestUsers/prov/bulkDelete HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept: application/json Content-type: application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <p>If the operation is successful:</p> <pre>{   "message": "All Guest Users are deleted successfully." }</pre> <p>If the operation fails:</p> <pre>{   "message": "Guest Users Delete Operation Failed. Please retry." }</pre>

## Fetching Guest User Details by Username for a Provisioner

This API is used to get the details of a particular Guest User by username for a Provisioner.

 **Note:**

If the user account is permanent, then the end date in the response pay load is displayed as: "\_"

Fetching Guest User details by username for a Provisioner	
<b>URI</b>	/rest/guestUsers/guestUserDetails/{username} <b>Note:</b> username is a Guest User's name.
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK

*Table continues...*

**Fetching Guest User details by username for a Provisioner**

**Response Payload**      Guest User Details

**Example****Request**

```
GET /GIM/rest/guestUsers/guestUserDetails/guestUser1 HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept:application/json
Cache-Control: no-cache
```

**Response Payload JSON format)**

```
{
  "GuestUser": {
    "userName": "guestUser1",
    "firstName": "guest",
    "lastName": "User1",
    "email": "test@extremenetworks.com",
    "smsAddress": "2991199112@tmomail.net",
    "startDate": "2018/06/25 04:16:41",
    "endDate": "2018/06/25 09:16:41",
    "onboardingTemplate": "pg-api-user",
    "provisioner": "pall",
    "singleMembershipAccessGroups": IT,
    "multipleMembershipsAccessGroups": ["Wired", "Wireless"],
    "enabled": true,
    "deleteOnExpire": true
    "custom1": "Text1",
    "custom2": "Text2",
    "custom3": "Text3",
    "custom4": "Text4",
  }
}
```

The following are the details of a Guest User whose account is permanent:

```
{
  "GuestUser": {
    "userName": "guestUser1",
    "firstName": "guest",
    "lastName": "User1",
    "email": "test@extremenetworks.com",
    "smsAddress": "2991199112@tmomail.net",
    "startDate": "2018/06/25 04:16:41",
    "endDate": "-",
    "onboardingTemplate": "pg-api-user",
    "provisioner": "pall",
    "singleMembershipAccessGroups": IT,
    "multipleMembershipsAccessGroups": ["Wired", "Wireless"],
    "enabled": true,
    "deleteOnExpire": true
    "custom1": "Text1",
    "custom2": "Text2",
    "custom3": "Text3",
    "custom4": "Text4",
  }
}
```

## Variable Definition

The following table describes the parameters of Guest User details:

Attribute	Type/Value	Description
userName	String	Specifies the username of the Guest User account.
firstName	String	Specifies the first name of the Guest User.
lastName	String	Specifies the last name of the Guest User.
email	String	Specifies the Email address of the Guest User account.
smsAddress	String	Specifies the SMS Address of the Guest User account. The format is mobilephone@gateway. For example, 2991199112@tmomail.net
startDate	String	Specifies the activation date and time for Guest User account.  The date format is yyyy/MM/dd and HH:mm:ss for time. For example, 2018/06/06 11:10:00.
endDate	String	Specifies the expiry date and time of Guest User account  The date format is yyyy/MM/dd and HH:mm:ss for time. For example, 2018/06/06 18:10:00.
onboardingTemplate	String	Specifies the Onboarding Template of the Guest User account.
provisioner	String	Specifies the username of the Provisioner who registered / last updated the Guest User account.
singleMembershipAccessGroups	String	Specifies the Single Membership Access Groups the Guest User account belongs to.
multipleMembershipsAccessGroups	Array	Specifies the Multiple Membership Access Groups the Guest User Account belongs to.
enabled	Boolean	Specifies the Guest User account status. Parameter and values are:  <ul style="list-style-type: none"> <li>• If true, then Guest User account is active.</li> <li>• if false, then Guest User account is inactive.</li> </ul>
deleteOnExpire	Boolean	Specifies whether the Guest User account must be deleted on expiry. Accepted input values are true/false. The delete on expiry configuration depends on Onboarding Template Settings.  <ul style="list-style-type: none"> <li>• If no value is sent, then deleteOnExpire is set to configured Onboarding Template default value for Non Permanent Records. For Permanent Records, it is set to false.</li> </ul>
custom1 to custom 6	String	Specifies the values for custom attributes 1 to 6.

*Table continues...*

Attribute	Type/Value	Description
		For example, the custom1 attribute is set to false in the Onboarding Template then the value of custom1 is not sent. Likewise for the remaining custom attributes.

## Fetching Guest Users Iteratively for a Provisioner

Use this procedure to fetch guest users iteratively for a Provisioner. Single and Multiple Membership User Groups will not be part of the Response Payload. You need to use [Fetching Guest User Details by Username for a Provisioner](#) on page 68 to view the Access Groups the Guest User belongs to.

1. Get next N Guest Users. For more information, see [GET Next N Guest Users](#) on page 71.
2. Get first N Guest Users. For more information, see [GET First N Guest Users](#) on page 73.
3. Get last N Guest Users. For more information, see [GET Last N Guest Users](#) on page 74.
4. Get count of total available Guest User records. For more information, see [GET count of Total Available Guest User Records](#) on page 76.

**\* Note:**

The value for N can range from 1 to 500.

## GET Next N Guest Users

Use this API to get the next set of N Guest Users from a start index, with or without details.

GET next N Guest Users	
<b>URI</b>	<pre>/rest/guestUsers/next?start=&lt;start_index&gt;&amp;limit={N}</pre> <p><b>To get the next N Guest Users without details, use:</b></p> <pre>/rest/guestUsers?start={start-index}&amp;limit={N}&amp;hideDetails=true</pre> <p><b>* Note:</b></p> <ul style="list-style-type: none"> <li>• if hideDetails=true then Response does not contain the Guest User details.</li> <li>• if hideDetails=false or if this parameter is not specified, then the Response contains the Guest User details. This is the default.</li> </ul>
<b>Method</b>	GET
<b>HTTP Headers</b>	<pre>Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json</pre>
<b>Response Code</b>	200 OK

*Table continues...*

<b>GET next N Guest Users</b>	
<b>Response Payload</b>	Guest User List
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/guestUsers?start=0&amp;limit=2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "GuestUserList": {     "GuestUser": [       {         "userName": "GuestUser1",         "firstName": "guest",         "lastName": "User1",         "email": "test12@extremenetworks.com",         "smsAddress": "9845342309@T-Mobile",         "startDate": "2018/06/24 04:16:41",         "endDate": "2018/06/24 08:16:41",         "onboardingTemplate": "p-api-user-device",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true       },       {         "userName": "GuestUser2",         "firstName": "Guest",         "lastName": "User2",         "email": "test884@extremenetworks.com",         "smsAddress": "9622000000@tmomail.net",         "startDate": "2018/06/24 04:16:41",         "endDate": "2018/06/25 12:16:41",         "onboardingTemplate": "pg-fl-no",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true       }     ]   } }</pre> <p><b>Request without Guest User details</b></p> <pre>GET /GIM/rest/guestUsers?start=0&amp;limit=2&amp;hideDetails=true HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload without Guest User details</b></p> <pre>{   "GuestUserList": {     "GuestUser": [       {</pre>

*Table continues...*



**GET next N Guest Users**

```

        "userName": "GuestUser1"
      },
      {
        "userName": "GuestUser2"
      }
    ]
  }
}

```

## GET First N Guest Users

Use this API to get the first N Guest Users, with or without details.

**GET first N Guest Users**

**URI** /rest/guestUsers/first?limit={N}

**To get the first N Guest Users without details, use:**

/rest/guestUsers?limit={N}&hideDetails=true

 **Note:**

- if hideDetails=true then Response does not contain the Guest User details.
- if hideDetails=false or if this parameter is not specified, then the Response contains the Guest User details. This is the default.

**Method** GET

**HTTP Headers** Authorization Scheme: Basic (Base64 encryption)  
 Authorization: username:password  
 api-version:{VERSION}  
 Accept: application/json

**Response Code** 200 OK

**Response Payload** Guest User List

**Example Request**

```

GET /GIM/rest/guestUsers?limit=2 HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept: application/json
Cache-Control: no-cache

```

**Example Response Payload**

```

{
  "GuestUserList": {
    "GuestUser": [
      {
        "userName": "GuestUser1",
        "firstName": "Guest",
        "lastName": "User1",
        "email": "test12@extremenetworks.com",

```

*Table continues...*

GET first N Guest Users	
	<pre> "smsAddress": "9845342309@T-Mobile", "startDate": "2018/06/24 04:16:41", "endDate": "2018/06/24 08:16:41", "onboardingTemplate": "p-api-user-device", "provisioner": "pall", "enabled": true, "deleteOnExpire": true     },     {       "userName": "GuestUser2",       "firstName": "Guest",       "lastName": "User2",       "email": "test884@extremenetworks.com",       "smsAddress": "9622000000@tmomail.net",       "startDate": "2018/06/24 04:16:41",       "endDate": "2018/06/25 12:16:41",       "onboardingTemplate": "pg-fl-no",       "provisioner": "pall",       "enabled": true,       "deleteOnExpire": true     }   ] } </pre>
	<p><b>Request without Guest User details</b></p> <pre> GET /GIM/rest/guestUsers?limit=2&amp;hideDetails=true HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache </pre>
	<p><b>Response Payload without Guest User details</b></p> <pre> {   "GuestUserList": {     "GuestUser": [       {         "userName": "GuestUser1"       },       {         "userName": "GuestUser2"       }     ]   } } </pre>

## GET Last N Guest Users

Use this API to get the last N Guest Users, with or without details.

GET last N Guest Users	
URI	/rest/guestUsers/last?limit={N}
	<b>To get the last N Guest Users without details, use:</b>
	/rest/guestUsers?limit={N}&hideDetails=true

Table continues...

GET last N Guest Users	
	<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• if hideDetails=true then Response does not contain the Guest User details.</li> <li>• if hideDetails=false or if this parameter is not specified, then the Response contains the Guest User details. This is the default.</li> </ul>
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Guest User List
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/guestUsers?limit=2 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "GuestUserList": {     "GuestUser": [       {         "userName": "GuestUser9",         "firstName": "Guest",         "lastName": "User9",         "email": "test10@extremenetworks.com",         "smsAddress": "9123456789@tmomail.net",         "startDate": "2018/06/25 04:16:41",         "endDate": "2018/06/25 09:16:41",         "onboardingTemplate": "pg-api-user",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true       },       {         "userName": "GuestUser10",         "firstName": "Guest",         "lastName": "User10",         "email": "test9@extremenetworks.com",         "smsAddress": "9329393922@tmomail.net",         "startDate": "2018/06/24 04:16:41",         "endDate": "2018/06/25 12:16:41",         "onboardingTemplate": "pg-user-email-phone",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true       }     ]   } }</pre>

Table continues...

GET last N Guest Users
<pre>         }       }     }   } } </pre> <p><b>Request without Guest User details</b></p> <pre> GET /GIM/rest/guestUsers?limit=2&amp;hideDetails=true HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache </pre> <p><b>Response Payload without Guest User details</b></p> <pre> {   "GuestUserList": {     "GuestUser": [       {         "userName": "GuestUser1"       },       {         "userName": "GuestUser2"       }     ]   } } </pre>

## GET count of Total Available Guest User Records

Use this API to get the total count of Guest User records for a Provisioner.

GET count of total available Guest User records	
<b>URI</b>	/rest/guestUsers/count
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Count of Guest User
<b>Example</b>	<p><b>Request</b></p> <pre> GET /GIM/rest/guestUsers/count/ HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache </pre> <p><b>Response</b></p> <p>10</p>


## Error Cases

The following table describes the error cases for fetching available Guest Users iteratively for a Provisioner:

Error Case	Response Code	Error Response
Invalid start index	400 Bad Request	errorCode: INVALID_START_INDEX msg: Invalid start index: Missing or contains invalid value.
Invalid limit	400 Bad Request	errorCode: INVALID_LIMIT msg: Invalid limit. Please specify a value in the range 1 to 500.
No record found	204 No content	errorCode:NO_RECORD_FOUND msg: No records match the provided criteria.

## Fetching Guest Users Based on Filter Criteria

Use this API to fetch Guest Users based on filter criteria. Single and Multiple Membership User Groups will not be part of the Response Payload. You need to use the procedure [Fetching Guest User Details by Username for a Provisioner](#) on page 68 to view the Access Groups the Guest User belongs to.

Fetching Guest Users based on filter criteria	
<b>URI</b>	/rest/guestUsers?field=<field-name>&oper=<filter-option>&value=<value>&limit={N}&start=<start_index>   <b>Note:</b> The value for N can range from 1 to 500. The value for start_index can be any positive number. By default, the value is 0.
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	A list of Guest Users that match the filter criteria.

*Table continues...*

Fetching Guest Users based on filter criteria	
<b>Example</b>	<p><b>Request</b></p> <pre>GET GIM/rest/guestUsers? field=username&amp;oper=startWith&amp;value=Guest&amp;limit=2 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-type: application/json</pre> <p><b>Response Payload</b></p> <pre>{   "GuestUserList": {     "GuestUser": [       {         "userName": "GuestUser1",         "firstName": "guest",         "lastName": "User1",         "email": "test12@extremenetworks.com",         "smsAddress": "9845342309@T-Mobile",         "startDate": "2018/11/09 04:16:41",         "endDate": "2018/11/90 08:16:41",         "onboardingTemplate": "p-api-user-device",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true,       },       {         "userName": "GuestUser2",         "firstName": "Guest",         "lastName": "User2",         "email": "test884@extremenetworks.com",         "smsAddress": "9622000000@tmomail.net",         "startDate": "2018/11/09 04:16:41",         "endDate": "2018/11/10 12:16:41",         "onboardingTemplate": "pg-fl-no",         "provisioner": "pall",         "enabled": true,         "deleteOnExpire": true,       }     ]   } }</pre>

### Filter Criteria for a Guest User

The following table describes the filter criteria for a Guest User:

Filter Criteria	Options	Value Type	Description
userName	equals notEquals startsWith endsWith contains	String	Username

*Table continues...*

Filter Criteria	Options	Value Type	Description
firstName	equals notEquals startsWith endsWith contains	String	First name
lastName	equals notEquals startsWith endsWith contains	String	Last name
email	equals notEquals startsWith endsWith contains	String	Email
startDate	greaterThan greaterThanEqual lessThan lessThanEqual	Date Format: YYYY/MM/dd hh:mm:ss A zone-name Example: 2018/09/08 10:10:23 AM Asia/ Kolkata * <b>Note:</b> Special characters in the zone name, if any, must be encoded.	Start date and time of Guest User account
endDate	greaterThan greaterThanEqual lessThan lessThanEqual	Date Format: YYYY/MM/dd hh:mm:ss A zone-name Example: 2018/09/08 10:10:23 AM Asia/ Kolkata * <b>Note:</b> Special characters in the zone name, if	Expiry time of Guest User account

*Table continues...*

Filter Criteria	Options	Value Type	Description
		any, must be encoded.	
smsAddress	equals notEquals	String	SMS Address
onboardingTemplate	equals	String	Onboarding Template name  <span style="color: green;">*</span> <b>Note:</b> The Provisioner must have access to the Onboarding Template, and have Guest User creation rights.

## Fetching Guest User Custom Labels

Use this API to fetch the Custom Labels for a Guest User.

Fetching Guest User custom labels	
<b>URI</b>	/rest/guestUsers/getCustomLabels
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json Content-Type: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Custom Labels for a specific Guest User.
<b>Example</b>	<p><b>Request</b></p> <pre>GET /rest/guestUsers/getCustomLabels HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Content-Type: application/json</pre> <p><b>Response Payload</b></p>

*Table continues...*



**Fetching Guest User custom labels**URL: <https://GIM/rest/guestUsers/getCustomLabels>

```

{
  "userCustomLabel1": {
    "en": "AadharNumber",
    "fr": "",
    "it": ""
  },
  "userCustomLabel2": {
    "en": "Country",
    "fr": "",
    "it": ""
  },
  "userCustomLabel3": {
    "en": "PAN card",
    "fr": "",
    "it": ""
  },
  "userCustomLabel4": {
    "en": "City",
    "fr": "",
    "it": ""
  },
  "userCustomLabel5": {
    "en": "Pin code",
    "fr": "",
    "it": ""
  },
  "userCustomLabel6": {
    "en": "Guest details",
    "fr": "",
    "it": ""
  },
}

```

## API to Query the Status of Single User

Use this API to query the status of a single user to check whether the user exists or if the user account has expired.

Query the status of single user	
<b>URI</b>	/rest/guestUsers/userStatusQuery/{userName}
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Status of a Guest User

*Table continues...*

Query the status of single user	
	<p><b>Note:</b></p> <p>The status of a user could be as follows:</p> <ul style="list-style-type: none"> <li>• FOUND - if user exists.</li> <li>• NOT_FOUND - if user does not exist.</li> <li>• FOUND_BUT_EXPIRED - if user exists but expired.</li> </ul>
<b>Example</b>	<p><b>Request</b></p> <pre>GET /GIM/rest/guestUsers/userStatusQuery/user1 HTTP/1.1 Host: 192.0.2.1 api-version: v1.0 Authorization: Basic dGVzdDp0ZXN0 Accept:application/json Cache-Control: no-cache</pre> <p><b>Response Payload</b></p> <pre>{   "User": {     "userName": "user1",     "status": "NOT_FOUND"   } }</pre>

## API to Query the Status of Multiple Users

Use this API to query the status of a single user to check whether the users exists or if the user accounts have expired.

API to query the status of multiple users	
<b>URI</b>	/rest/guestUsers/userStatusQuery?userNames=<username1 username2 username3... usernameN>
	<p><b>Note:</b></p> <p>  is a separator between usernames. A maximum 100 usernames can be passed in a query.</p>
<b>Method</b>	GET
<b>HTTP Headers</b>	Authorization Scheme: Basic (Base64 encryption) Authorization: username:password api-version:{VERSION} Accept: application/json
<b>Response Code</b>	200 OK
<b>Response Payload</b>	Status details of the queried Guest Users.

*Table continues...*

**API to query the status of multiple users****Example****Request**

```
GET /GIM/rest/guestUsers/userStatusQuery?userNames=user1|user2|user3
HTTP/1.1
Host: 192.0.2.1
api-version: v1.0
Authorization: Basic dGVzdDp0ZXN0
Accept:application/json
Cache-Control: no-cache
```

**Response Payload**

```
{
  "UserList": {
    "User": [
      {
        "userName": "user1",
        "status": "NOT_FOUND"
      },
      {
        "userName": "user2",
        "status": "FOUND"
      },
      {
        "userName": "user3",
        "status": "FOUND_BUT_EXPIRED"
      }
    ]
  }
}
```